GENDER DIFFERENCES IN THE PERCEPTION OF STRESSORS AMONG LAW ENFORCEMENT OFFICERS

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Abstract of Dissertation Presented to the Graduate School of the University of Florida in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy

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Bv

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Stress impacts the officer, the organization and the community. It is important to recognize differences in the frequency of stressors, the perception of their intensity and the various coping and appraisal strategies used by law enforcement officers. Law enforcement is dominated by men and characterized by male gender-role ideals, including aggression, competition, a justice-orientation and stigma about dealing with emotions. Despite research indicating differences in coping and stressor appraisal, agencies treat all officers as if they have similar perceptions and reactions

Consequently, many officers fail to effectively cope with stress Researchers in other countries have attempted to identify differences that make officers more susceptible to burnout Research pertaining to female law enforcement officers has produced conflicting results about: the relationship of gender, gender-role and coping style to the experience of work stress. Explanations about the mixed findings regarding the

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perceived frequency and intensity of work stress experienced by male and female officers have asserted differences are due to a) differential duty assignments, b) using gender as the independent variable instead of gender-role, c) females engaging in "social work policing" and d) researchers looking at macro-stressors.

This study examines 1) the relationship between gender, gender-role and work stress, 2) whether there are differences in the types of stressors that male and female officers perceive as stressful, and 3) which coping styles are most effective for which types of stress among different people.

The results of this study indicate that the perceived intensity of job-risk stress and the perceived frequency of organizational stress contributed most to the prediction of overall work stress in both male and female officers. Further, between a third and two-thirds of officers report frequent feelings of irritability, fatigue, restlessness, depression and feelings of numbing and detachment.

CHAPTER 1 INTRODUCTION

A number of studies have found that high stress levels are associated with physical, psychological and interpersonal problems in police officers (Bonifacio, 1991; Janik and Kravitz, 1994; Schmidtke et al., 1999). This contributes to high rates of employee illness, turnover, burnout, addictions, suicide and divorce (DeLey, 1984: Ansen and Colon, 1995; Alexander and Walker, 1996; Paton and Violanti, 1997; Loo, 1999). Illnesses such as diabetes, coronary artery disease, high blood pressure and migraine headaches have been found to occur more frequently in law enforcement personnel than in the general population (Violanti and Vena, 1986). More than 70% of those who have remained on the force for more than 5 years display at least sub-clinical levels of posttraumatic stress disorder (PTSD) or generalized anxiety disorder (Anderson, 1998). In 1997, Robinson, Sigman and Wilson examined the effects of duty-related stress on 100 suburban police officers. The results showed significant correlations among scores on duty-related stress, somatization, and symptoms of PTSD. Thirteen percent of the sample met the Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV) diagnostic criteria for PTSD, and the best predictors for the diagnosis of PTSD were exposure to death and life threat. Another study, in 1997, by Ingrid Carlier, Regina Lamberts and Berthold Gersons examined the risk factors for posttraumatic stress symptoms in 262 police officers. The results indicated that 7% of the sample met the diagnostic criteria for PTSD. Another 34% of the sample had subthreshold symptoms of posttraumatic stress. Trauma severity was the best predictor of post-traumatic stress symptoms extending

three or more months beyond the date of the initial trauma. Introversion, difficulty in expressing feelings, emotional exhaustion at time of trauma, insufficient time allowed by employer for coming to terms with the trauma, dissatisfaction with organizational support, and insecure job future also predicted posttraumatic stress symptoms at the three month assessment. Twelve months after the trauma, officers who lacked hobbies, displayed acute hyperarousal, had subsequent traumatic events, were brooding over work, and had a lack of social interaction and support in the private sphere were still displaying symptoms of posttraumatic stress.

The stress of police work also impacts officers' families (Bonifacio, 1991;

Alexander and Walker, 1996; Finn and Tomz, 1996). Law enforcement families report a
68% divorce rate, and a 24% greater incidence of domestic violence (Ansen and Colon,
1995; Finn and Tomz, 1996).

Research thus far has been based primarily upon the experience of male law enforcement officers. Since the late 1970's the percentage of women in law enforcement has increased from less than 5% to almost 10% (Kurke and Scrivner, 1995). Little is known about this growing minority in law enforcement in the United States. The research that has been done is largely qualitative in nature, and evaluates stress in terms of macro-stressors (work stress, home stress, physical health) (Adler-Russel, 1983; Colegrove, 1983; Mayer, 1993; Bannerman, 1996; Picore, 1997; Geick, 1998). In previous studies, stress has been categorized as home/family stress, work stress and physical stress (Burke, 1993; Kirkcaldy et al., 1995). The studies have utilized small sample sizes and/or qualitative designs using semi-structured interviews (Adler-Russel, 1983; Colegrove, 1983; Van Essen, 1990; Rodichok, 1995; Tye, 1995; Bannerman, 1996).

Since gender and coping style have been linked to differences in stress levels, it is important to examine the roles that gender and coping style play in the stress experienced by law enforcement officers (Greenglass, 1995; Bannerman, 1996; Cimbura, 1999). This study focuses on the relationship among gender, gender-role and coping style and how they relate to the experience of work stress by male and female law enforcement officers. Following are a description of the problem, the need for the study and an overview of the rationale and design of the study.

Scope of the Problem

Law enforcement officers experience a variety of chronic and acute stressors specific to their career, these include: chronic primary and secondary victimization, and related adjustment issues such as depression, suicide, burnout and domestic violence (Violanti and Aron, 1993; Violanti and Aron, 1994; Finn and Tomz, 1996; Paton and Violanti, 1996; Biggam et al., 1997; Robinson et al., 1997; Anshel, 2000). Primary victimization occurs when officers themselves are the object of an assault to their person or property such as being physically assaulted or threatened. Secondary victimization is the impact that occurs after witnessing someone else being victimized or as a result of becoming intimately familiar with the incident through the investigation (Kroes, 1976; Figley, 1995; McCammon and Allison, 1995; Violanti and Paton, 1999). Stressors have been identified in all aspects of the officer's life; vocational, emotional, intellectual, spiritual, social and physical (Crose et al., 1992; Myers, 1992; Brown and Campbell, 1994; Finn and Tomz, 1996). These stressors lead to a high rate of employee turnover, absenteeism, lowered morale, low productivity, personal physical and psychological distress, addictions and family problems (Maynard and Maynard, 1982; Alexander and Walker, 1996; Finn and Tomz, 1996). When the police department is viewed in its

entirety, the systemic effects of stress can be seen (Anderson, 1996). Initially, officers have an unbridled sense of optimism and enthusiasm to "change the world." When they become aware of the seeming insurmountable amount of crime and the problems in the criminal justice system, many officers become disillusioned and their morale plummets (Kroes, 1988; Kurke and Scrivner, 1995; Anderson, 1998). Not only can they not do what they had set out to do, but also, every time they turn around, they are being reprimanded (Finn and Tomz, 1996). Supervision in law enforcement can be punitive (Reiser and Geiger, 1984; Violanti and Aron, 1993). Complaints and reprimands are often found in officers personnel files, and this furthers their morale problems.

As officers become increasingly unhappy, it can affect the physical, social and vocational aspects of their life (Wood, 1982; Violanti et al., 1986; Quick et al., 1992). Stress tends to reduce their immune systems (Olff, 1999). They withdraw from emotional supports and begin to call in sick more frequently (Perrier and Toner, 1984; Reiser and Geiger, 1984). This causes a subsequent increase in the workload (and stress) for the rest of the team who have to cover for the absent officer. Many officers turn to alcohol, over-the-counter sleep aids, and other addictive behaviors in order to try to numb their distress (Dietrich and Smith, 1986; Wolford, 1993; Alexander and Walker, 1994; Ansen and Colon, 1995; Alexander and Walker, 1996; Richmond et al., 1998). This, along with the unspoken rule against discussing feelings, contributes to officer's psychological distress and often exacerbates poor family relations (Gersons, 1989; Alexander and Walker, 1994; Alexander and Walker, 1996). Spouses and children of officers often know something is wrong, but they are shut out by the officer. Eventually, these couples grow apart and the marriage dissolves causing yet another stressor in the officer's life (Ansen and Colon, 1995). All of these problems cost the department in

terms of the quality and quantity of productivity from their officers, which makes services provided to the community less effective (Burke, 1993).

Statement of the Problem

In the past 30 years, the idea of the traditional masculine and feminine genderroles has become somewhat antiquated as the needs of society have changed. Nevertheless, in those arenas where tradition is paramount, such as law enforcement, the change has occurred much more slowly. Traditionally, men were expected to be aggressive, competitive, justice-orientated and unshaken by emotions. Women were expected to be the opposite, passive, cooperative, caring and very emotional. Law enforcement is still, in large part, dominated by men and characterized by strong, traditionally male gender-role behaviors and ideals (Berg and Budnick, 1986; Bannerman, 1996; Finn and Tomz, 1996). It is becoming increasingly accepted for women to exhibit traditionally masculine gender-role behaviors, but male officers are still discouraged from showing more feminine gender-role behaviors such as emotion, empathy and a care-orientation (Gilligan, 1977; Ansen and Colon, 1995; Paton and Violanti, 1996; Patterson, 1998). Although strong emotional defenses are necessary to do the job, many officers fail to ever cope with repressed emotions (Sewell, 1994; Volianti, 1996; Loo, 1999).

Many departments still attempt to address these sources of work stress as if they are a general pressure that is dealt with in a stereotypical way by all officers. For instance, after a "critical incident" representatives from internal affairs are the first people (besides their lawyer) that officers are allowed to talk with. Anyone not directly involved is sent back out to handle calls. Everyone is told not to discuss the incident with anyone until internal affairs has completed its investigation. A week or two later, a critical

incident stress debriefer is called in to "debrief" the officers in a group setting. Although there are several methods of critical incident stress debriefing, the main focus, for most models of critical incident stress debriefing, remains on the facts of the event. Officers are asked to recall and describe the incident, clarify what happened, what they could have done and state their reactions. Generally, these sessions remain on a very intellectual level (McCammon and Allison, 1995). Research contradicts the notion that problem focused recall and processing is most effective for all people (Barnett et al., 1987; Bannerman, 1996). Although stress levels may be similar among officers and between genders, the types of stressors perceived as most intensely stressful and effective ways of coping with those events may be very different for different people (Barnett et al., 1987; Bruder-Mattson and Hovanitz, 1991; Keita and Sauter, 1994; Havlovic and Keenan, 1995).

Very generally, there are two main ways to cope with problems (Carver et al., 1989). The first is called emotion-focused coping. This is when people deal with their feelings about the problem, then set out to find a solution to the problem or change the way they think about the problem. The second is problem-focused coping which focuses on resolving the problem and the feelings associated with the problem dissipate after the problem is resolved. Another way of dealing with problems, albeit ineffective, is through the use of defenses such as avoidance and denial (Bonifacio, 1991; Alexander and Walker, 1994). In law enforcement, problem-focused coping and the use of defenses are encouraged (Bonifacio, 1991; Alexander and Walker, 1994; Miller, 1995). There is no time for feelings. Unfortunately, many officers spend so many years blocking feelings that they reach a point that they are terrified to feel anything, because they fear becoming overwhelmed (Miller, 1995). People who tend to use emotion-focused coping are often

not given the type of support they need on-scene and later in critical incident stress debriefings. This may impair the quality of their judgment and decisions on scene as well as compound the stress because they have few, if any, outlets to utilize immediately after the crime scene is processed (Moradi et al., 1999; Jenkins et al., 2000). If they are left with overwhelming emotions to contend with, many officers try to escape (Alexander and Walker, 1996; Paton and Violanti, 1997). They cannot bear to go home and sit still, because they will have to think about the tragedy they have witnessed. They often have difficulty sleeping and high levels of anxiety about whether they did and said all of the right things (Stratton et al., 1984; Finn and Tomz, 1996). They may relive the incident repeatedly in their mind in order to try to find the right answer. In many cases, officers never receive closure (Finn and Tomz, 1996). They turn in their paperwork, and, as far as their superiors are concerned, they are free of the case. Nevertheless, they were impacted and victimized by the scene (Kroes, 1976; Sewell, 1994; Mitchell, 1999). They also want to see the perpetrator brought to justice almost as badly as the primary victim. This is the only way they can regain their control. Otherwise, they are plagued by thoughts of what they could have and should have been doing to prevent the crime (knowing full well they cannot be all places at all times) (Finn and Tomz, 1996).

There is a strong possibility that gender diversity within the ranks and changes in gender-role definitions in the larger community means that there may be an increase in emotion-focused copers within law enforcement. If that is the case, then critical incident stress debriefing needs to be tailored to accommodate all types of people.

Need for the Study

As the profession of law enforcement expands, the gender and gender-role diversity within the ranks increases. In order to prevent high turnover rates, absenteeism

and low productivity, it is vitally important to develop knowledge about how gender, gender-roles and different coping and appraisal styles can be responded to by law enforcement agencies. Understanding how gender-role and gender impact officers' perceptions about the world and their job as well as understanding how they cope with stress can help departments create stress management programs that cater to the officer. Currently if officers want help, they are often forced to fit into an artificial mold that dictates how, when and why stress is a problem and should be dealt with (Gaines and Jermier, 1983; Jones, 1998). Even departments with employee assistance programs (EAPs) find that these programs are often under utilized (Reichman and Guglielmo, 1990; Ansen and Colon, 1995). Unfortunately, many EAPs are too extreme in their focus on emotions and feelings. The rare officer who risks going to counseling often leaves feeling unheard and misunderstood (Jones, 1998).

Burnout, high turnover rates and susceptibility of officers to committing acts of police brutality are only going to emphasize the consequences and costs of ineffective, rigid stress management programs that fail to take into account individual differences (Bonifacio, 1991).

Rationale and Design

Individual characteristics, such as gender, coping style and gender-role, may affect the frequency of exposure and/or the perception of the intensity of the stressor (Adler-Russel, 1983; Bogg and Cooper, 1994; Speilberger et al., 1994; Roxburgh, 1996; Picore, 1997; Christie and Shultz, 1998; Stein and Nyamathi, 1999). Knowledge of these factors, which strongly correlate with high levels of stress, will assist law enforcement agencies in modifying or preventing factors that contribute to stress related problems at an individual, interpersonal and organizational level.

Some research has indicated that the types of events perceived as stressful vary between the genders (Bogg and Cooper, 1994; Keita and Sauter, 1994). Nevertheless, these studies have been difficult to replicate successfully. Another dimension to be considered is gender-role. As a culture, girls and boys are raised with certain beliefs about what is acceptable behavior for their gender. For instance, our stereotypical gender-roles within American culture are more permissive of emotional expression from women than men. We teach women to tend more to a family's emotional needs and men to tend to the financial and security needs. It is this difference in role-expectations that may cause people with different gender-role beliefs to perceive different events as stressful. For instance, in 1994, Gwendolyn Keita found that women tend to find inter-office politics and rivalries more stressful and men tend to find the low pay and limited advancement opportunities more stressful.

It is also this difference in role-expectations that may influence the coping styles of officers. Ten years ago, law enforcement lacked much of its current diversity. Now it is not safe to assume that every male and female on the police force ascribes to a highly masculine gender-role or a problem-focused coping style (Wexler, 1985; Berg and Budnick, 1986; Bannerman, 1996). As the level of diversity increases, it seems that officers are becoming less socialized into the role of the stereotypical, masculine cop (Kurke and Scrivner, 1995). Some of the more traditionally feminine values such as caring, compassion and cooperation are becoming increasingly accepted, even by male officers.

Some studies indicate that the most effective coping style is dependent upon the situation, not the person's gender or gender role (Evans et al., 1993). For instance, it has been demonstrated that for both genders problem-focused coping seems to work best with work-stress, but emotion focused coping works best with family-stress (Patterson, 1998).

Finally, the frequency with which officers encounter various types of stressors has rarely been measured (Paton and Violanti, 1996; Parsons, 1996; Geick, 1998). Officers who work within the same department are going to have different levels of exposure to stressful events based upon their duty assignment, the area they patrol and what they consider stressful. For instance, if a person finds inter-office politics to be much more stressful than dangers of the road, then she or he will find a patrol duty assignment to be much less stressful than someone who is hypervigilant on the road.

In this investigation, patrol officers from several law enforcement agencies in Florida were asked to complete a set of paper-pencil inventories in order to identify variables that contribute to the differences in the perception of work stress, organizational stress and overall or "composite" stress among male and female law enforcement officers.

Definition of Terms

In order for this study to be fully understood, it is essential that some terms be operationally defined. Thus, the following terms are defined as follows:

<u>Coping style</u> refers to active behaviors aimed at either changing the situation or the way a person is reacting to a situation.

Gender-role is a set of behaviors that is stereotypically representative of one gender. In this study, the gender-role profile is representative of early American definitions.

<u>Job-risk stressors</u> are events associated with threat of harm to oneself or others as a result of participation in police work <u>Macro-stressors</u> are broad categories of events that cause stress such as "home stress" or "work stress"

<u>Micro-stressors</u> are specific events within categories such as covering for a coworker, or office politics

<u>Occupational stressors</u> also referred to in the literature as organizational stressors originate from politics or policies within an organization.

<u>Para-military organizations</u> are organizations that are highly structured with a definite chain-of command protocol.

<u>Patriarchal activities</u> are those characterized by a strong adherence to maledominance and traditional male-gender-roles.

<u>"Social work policing"</u> is a style of policing characterized by an attempt to reconcile situations through communication, referral and care for people.

<u>Traumatic events</u> are those events outside of the range of everyday experience for the average civilian.

Overview of the Remainder of the Study

The following four chapters address the related literature, the methodology, the results of the study and a description of the limitations, conclusions, implications and recommendations for future research.

CHAPTER 2 REVIEW OF RELATED LITERATURE

Research into the effects of occupational stress began in the 1950s. It is well documented that stress at work can impact the individual emotionally, mentally, physically, socially, spiritually and vocationally (Hageman, 1982; Jenner, 1988; Quick, Murphy et al., 1992; Paton and Violanti, 1997). In addition the family and friends of the individual are affected by what has been termed "spill over" stress, that is, stress from work that impacts the individual in all other areas of functioning (Dennis, 1984; Barling, 1990; Vincent, 2000).

Stress in organizations can cause reduced morale and productivity as well as increased absenteeism and turnover (Tang and Hammontree, 1992; Speilberger and Reheiser, 1994; Greene and Nowack, 1995; Finn and Tomz, 1996). Communities are indirectly affected by law enforcement officers' stress due to reduced quality and quantity of service, and the increased cost to taxpayers for vocational rehabilitation of officers who have developed stress related illnesses such as alcoholism, depression and anxiety (Hageman, 1982; Speilberger and Reheiser, 1994; Cartwright and Cooper, 1997).

Many high-ranking police officers and sheriffs still believe that stress is not a problem that requires attention. This belief is based upon two assumptions 1) stress exists but it is a fundamental component of police work and therefore cannot be changed, and 2) there are limited resources of both time and money, which make stress a low priority (Brown and Campbell, 1994). Many studies have demonstrated that

police officers do have symptoms of stress even though they use defenses to deny that stress is a significant problem, a condition that has been coined the "John Wayne Syndrome" (Gersons, 1989; Tye, 1995; Alexander and Walker, 1996; Anderson, 1998)

Stress can generally be defined as the body's non-specific response to any demand placed upon it. There are two main types of stress, chronic and acute (Seaward, 1998). Chronic stressors are persistent everyday stressors of a low to moderate intensity such as organizational stress (i.e., organizational politics, poor supervision and shift work). The number, intensity and frequency of chronic stressors are additive and often exceed the long-term impact of any one acute stressor. Acute stressors are events that are time limited and intense, such as critical incidents (i.e., officer involved shootings or hurricanes).

Although stress is conceptualized as primarily a psychological phenomenon, its impact on the body cannot be minimized. As people experience psychological stress, physiological responses occur which prepare the body to encounter the stressor (Hyyppae, 1987; Hyyppae et al., 1988; Beerda et al., 2000). Therefore, both the mind and body have a demand placed upon them that, after a sufficient period, can lead to mental and physical exhaustion, depression and burnout.

This is an especially salient problem for law enforcement officers because law enforcement is one of the most stressful occupations. Compounding this problem is the very closed subculture and strong resistance to letting anyone behind the "blue wall" (Kroes, 1988; Kurke and Scrivner, 1995). Mental health professionals and researchers have only recently learned about the special needs of law enforcement officers. In addition, most of the research done has generalized results from studies using primarily male law enforcement officers.

This literature review is divided into the following sections: 1) the effects of stress on employees in general and law enforcement personnel in particular, 2) effects of stress or general organizational factors contributing to stress and factors specific to law enforcement agencies which contribute to stress, 3) coping and appraisal styles used to deal with stress, 4) gender and gender-role differences in coping styles and the experience of stress, 5) a synthesis of the literature review and 6) problems with the current literature.

Effects of Stress on Employees and Police Officers

Several qualities have been found to characterize "burnout work environments" in the general workforce. These include role overload, role ambiguity, role conflict, too much responsibility with little or no authority, insufficient resources or training, lack of sufficient rewards, unpleasant or unsafe working conditions, lack of mental stimulation, and lack of control over vocational future (Seaward, 1998; Kurke, 1995; Kroes, 1976; Hart, 1995). When one or more of these qualities is present, work becomes stressful. Burnout is an end-state resulting from extended periods of extreme stress. It is characterized by depersonalization, lack of a sense of personal accomplishment and emotional exhaustion (Burke et al., 1986; Burke, 1987; Burke, 1993).

Work-related mental disorders have been a topic for scholarly research for decades. Consider the following findings:

- In the past ten years, it is estimated that 80-85% of illnesses are stress related (Seaward, 1998).
- Almost 90 billion dollars is paid in worker's compensation claims for illnesses and injuries that are speculated to be the direct and indirect result of worker stress and exhaustion (Seaward, 1998; Bannerman, 1996).
- Law enforcement officers submit worker's compensation claims six times more often than other employees (Bannerman, 1996).

- In a survey of 553 police officers and spouses, 41% of male officers and 34% of female officers experience violent assaults in their marital relationships. Sixty six to 75% of officers experience divorce. Twenty percent of officers report excessive use of alcohol while on the job (Ansen and Colon 1995; Brown and Campbell, 1994).
- It is estimated that direct costs to industry of alcohol and drug abuse are close to \$80 billion per year. Fourteen percent of Americans abuse alcohol and 5% of Americans abuse or are dependent on illicit drugs (Kahn 1993).
- In a study of 852 officers, with a 89% participation rate, survey results indicated that
 almost half (48%) of males and more than two-fifths (40%) of females consumed
 alcohol excessively. Over one-quarter (27%) of male and one-third (32%) of female
 respondents reported smoking, and 12% of men and 15% of women reported feeling
 moderate to severe symptoms of stress (Richmond, 1998).
- In 1985 11% of all claims for occupational disease were made for "gradual mental stress" (Keita, 1992).
- Direct treatment and support costs comprise 45.3% of the total economic costs of mental disorders. The value of reduced or lost productivity comprises 42.7% of the total economic costs of mental disorders (Rice and Miller, 1993).
- Morbidity costs—the value of goods and services not produced because of health problems—amounted to \$63.1 billion for all mental disorders in 1990. Morbidity costs for anxiety disorders accounted for \$34.2 billion (Rice and Miller, 1993).
- Other related costs--the costs indirectly related to the treatment and lost productivity
 of people with mental disorders--amounted to \$6 billion in 1990 (Rice and Miller,
 1993).

Stress has been identified as a factor in the development of mental disorders such as anxiety, depression, addictions and burnout (Thomas-Riddle, 1985; Burke and Deszca, 1986; Hadaway et al., 1986; Quick et al., 1992; Alexander and Walker, 1994; Patterson, 1994; Alexander and Walker, 1996; Anderson, 1996). Anxiety has been attributed to workers feeling overwhelmed and out of control of their current situation. This often leads a reduction in productivity due to difficulty concentrating and problem solving (Speilberger et al., 1994)

Depression is associated with increases in feelings of helplessness and hopelessness. As workers perceive their work environment as uncontrollably stressful,

they lose hope. Many people whose depression progresses to full-blown burnout feel that they are unable to continue in their present job, but do not know what they will do if they quit (Burke and Kirchmeyer, 1990). This leads to a sense of helplessness and futility.

To deal with these feelings, employees often turn to emotional numbing and escape, sometimes using medication, or developing addictions or eating disorders (Quick, Murphy et al., 1992; Alexander and Walker, 1994; Alexander and Walker, 1996; Paton and Violanti, 1997; Richmond et al., 1999). In 1980, T.W. Robbins and P.J. Fray found that non-specific stimuli can bring about eating, and that emotional states including "hunger," "stress" and "anxiety" all cause similar internal changes. That is, "stress" can mistakenly be interpreted as "hunger" leading the person to eat instead of coping with the stressor. Factors affecting how the internal states are labeled include previous experiences and present circumstances. Therefore, a police officer who mistakenly thinks s/he is "hungry" every time s/he is under stress will tend to eat in response to that feeling state. When the feeling does not go away, s/he continues in vain to eat to try and make herself/himself feel better. The way people "learn" to label internal states is learned and can be observed when one considers cultural responses to anxiety, depression, stress, happiness and hunger (Robbins and Fray, 1980). When people are sick or depressed they are given "treats" to cheer them up. When people are anxious, they often eat to calm themselves. Americans eat at birthdays, holidays, celebrations and when in need of comfort such as funerals or after a trip to the doctor. As a result not only hunger but just about every mood state can come to be labeled "hunger" and elicit eating (Robbins and Fray, 1980).

One pervasive, chronic stressor in law enforcement is post-traumatic stress disorder (PTSD). When the benchmarks for the development of post-traumatic stress disorder (PTSD) are considered, most law enforcement officers experience a considerable number of traumatic events and display many symptoms of PTSD.

- A. The person has been exposed to a traumatic event.
- B. The traumatic event is persistently re-experienced.
- C. Persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (not present before the trauma).
- D. Persistent symptoms of increased arousal (not present before the trauma).
- E. Duration of the disturbance is more than one month
- F. The disturbance causes clinically significant impairment in social, occupational or other important aspects of functioning (DSM IV, 427-429). Although the incidents producing PTSD are considered acute stressors, for this population, they are often frequent, and their impact enduring (Mann and Neece, 1996; Finn and Tomz, 1996; Carlier et al., 1997; Robinson et al., 1997; Wilson et al., 1997; Anderson, 1998).

Many researchers have assessed the frequency of exposure to various stressors among law enforcement officers. In 1997, Holly Robinson, Melissa Sigman and John Wilson conducted a study to evaluate the frequency and effects of exposure to "duty-related stressors" in suburban American police officers. One hundred officers from three departments in Ohio were provided with an anonymous survey packet. The protocol included demographic information, a survey of duty-related stressors, the Symptoms Checklist Revised (SCL-R 90), the Posttraumatic Stress Disorder Scale, the Impact of Events Scale Revised and a six-question locus of control scale. In this study, the general category "death encounter" was characterized by activities ranging from controlling riots, doing CPR, seeing someone die, responding to a fatal motor vehicle accident, responding to domestic violence incidents involving a weapon and encountering people with contagious diseases such as tuberculosis or HIV. High scores for exposure to incidents in this category predicted, at the .05 level, overall PTSD, and symptoms of PTSD, intrusive traumatic memory, avoidance and hyperarousal.

Law enforcement officers experience some of the incidents that characterize "death encounter" on a daily or weekly basis. There were two main limitations to this study. First, several of the scales did not appear to have much, if any, reliability or validity data. Secondly, only surveying 100 officers from three departments in Ohio limited generalizability. Overall, the study provided insight into the high frequency of exposure to stressful situations and the enduring impact.

Another study, Risk Factors for Posttraumatic Stress Symptomology in Police Officers: A Prospective Analysis, was conducted by Ingrid Carlier, Regina Lamberts and Berthold Gersons in 1997. Two hundred and sixty two "traumatized" police officers were assessed for PTSD at three and twelve months using a structured interview. Results indicated that 7% of the sample population had PTSD and another 34% displayed symptoms of PTSD. At both three and twelve months, posttraumatic stress symptoms were predicted by the severity of the trauma, work dissatisfaction, and introversion or failure to seek social support. Emotional exhaustion also predicted posttraumatic symptoms at both intervals. At the three-month interview, emotional exhaustion at the time of the incident and insufficient time to recover were cited as predictors. At the twelve-month interview, additional traumatic incidents were predictors. This supports one of the dimensions discussed by Pynoos and Nader in their triage model assessing the differential impact of traumatic events on victim-witnesses (Pynoos and Nader, 1990). In this model, they assert that trauma severity can be predicted by the similarity of the person to the victim, the proximity of the offense to the person's home, preexisting psychopathology within the last six months, and the amount of social support the person has.

Admitting that one is impacted by obvious victimization is perceived badly, but even entertaining the idea that one was bothered by a crime in which he or she was not even the *primary* victim is seen as the ultimate in weakness (Figley, 1995; Finn and Tomz, 1996; Yee et al., 1998; Goldfarb, 2001). In 1996, Peter Finn and Julie Tomz completed a year-long study of law enforcement in order to provide information leading to the development of effective law enforcement stress programs. They interviewed over 100 people including police psychologists, administrators, union officials and officers and their families. One of the most commonly reported stressors was, in essence, secondary victimization. Nevertheless, there is still a huge stigma associated with seeking professional counseling (Finn and Tomz, 1996). Although work stress is often blamed for the development of PTSD, organizational stress has been found to greatly contribute to burnout.

Burnout is the result of feelings of hopelessness or helplessness left unattended. At this point, the worker has lost all ability to function effectively both at work and at home (Burke et al., 1986; Anderson, 1998). Chronic stress has been implicated in making the most significant contributions to the development of burnout and distress in workers (Burke, 1993).

In 1986 Ronald Burke and Eugene Deszca investigated the theory that burnout may be a progressive process whereby officers move through eight "phases" within the each of the categories of burnout: depersonalization, lack of personal accomplishment and emotional exhaustion. Participants were asked to complete a 56-item scale to assess stressful life events. This scale was purported to be similar to the Schedule of Recent Experiences created by Holmes and Rahe. They were also asked to complete the Malasch Burnout Inventory and a questionnaire that asked questions aimed at assessing

the five sources of experienced stress and the six areas of negative attitude change proposed by Cherniss, job satisfaction, individual well-being and health, home-work conflict, lack of social support and various demographic characteristics. Overall, 23% of respondents reported being in stage one and 23% reported being in stage eight in each of the three burnout dimensions: depersonalization, lack of personal accomplishment and emotional exhaustion. The other 54% of the officers were arrayed between the other six phases. An interesting point that was raised is that data from other studies investigating the phase model of burnout in the private sector have yielded significantly different results. This observation lead to speculation that occupational differences may exist within the burnout phases. This study again demonstrated the impact that high stress may have on officer's health and lives. Individuals who reported being in higher phases of burnout reportedly exercised less, drank more coffee and alcohol and smoked more (Burke and Deszca, 1986).

Only one study as examined gender differences in the prevalence of PTSD in law enforcement officers. In 1990, Denise Van Essen conducted a comparative study of cumulative traumatic stress disorder in male and female police officers in Michigan. She found that female officers reported fewer traumatic events and rated the exposure to events as less traumatic and of shorter duration than their male counterparts. Male officers were found to use a wider variety of coping resources including formal counseling. This seems to contradict almost all other studies (Alexander and Walker, 1994; Alexander and Walker, 1996). The type of duty men and women were assigned to was not controlled. The study only used ten officers and they were all from the same department, and the crime statistics for the department in question were not given in order to determine generalizability to other suburban and urban departments.

Several other studies investigating how officers cope with different types of stressors have been conducted. In 1994, Leslie Walker investigated 1000 police officers' methods and efficacy of coping with work-related stress, both off and on duty. Seven hundred and fifty eight completed surveys were returned. The response rate was the same for males and females. The most common methods of relaxation were: working harder (77%), keep things to myself (81%), talk things over with colleagues (85%), eating disturbances (66%), increased smoking (73%), and take it out on others (55%). Eight percent reported using alcohol or drugs to cope while on duty. Other coping methods assessed included delegation of tasks, seeking spiritual help, taking sick leave, exercising and using relaxation exercises (Alexander and Walker, 1994). Seventy three percent of officers surveyed viewed their current coping skills as only slightly effective.

Another study done by Robyn Richmond in 1998 used a cross-sectional survey to examine the prevalence of 5 life-style behaviors among New South Wales' police. Eight hundred and fifty two police, aged 18-65 years were surveyed regarding alcohol consumption, cigarette smoking, exercise, perception of overweight and stress symptoms were measured. Eighty-nine percent of the surveys were completed and returned. Forty-eight percent of males and 40% of females consumed alcohol excessively. Twenty-seven percent of male and one-third of female respondents reported smoking. Forty six percent of men and women believed that they were overweight. Twenty-one percent of men and 24% of women reported that they did not exercise. Finally, 12% of men and 15% of women reported feeling moderate to severe symptoms of stress (Richmond et al., 1998). This inability to adequately cope with stress has systemic effects on the officer's health and overall functioning.

Stress leads to physical distress as evidenced by changes in neurotransmitter balance, reduced immune function, increased fatigue, sleeping and eating changes and changes in blood pressure, blood sugar and cholesterol levels. Not only are workers calling in sick due to mental health problems, but they are also much more susceptible to developing physical ailments as well (Tang and Hammontree, 1992; Greene and Nowack, 1995; Schaubroeck and Merritt, 1997; Seaward, 1998). The tendency to get sick and resulting increases in absenteeism influence not only the quantity, but also the quality of functioning at work and at home.

Robin Greene and Kenneth Nowack investigated the relationship between hassles, hardiness and absenteeism in 229 private-sector employees, over a period of three years. Participants were given a six-item hassles scale that was derived from the 117 item Hassles Scale created by Kanner et al in 1981, the Revised Hardiness Scale, the Cognitive Hardiness Scale and a 12-item life-satisfaction scale. In addition, health was measured by absenteeism as documented in personnel records, and self-reported hospitalizations. In this study, hassles but not hardiness predicted absenteeism.

Michael Workman evaluated the relationship between stress and illness in police officers. Three groups of officers were surveyed using a survey to identify exposure to police events or injury in the previous year, and the Holmes and Rahe Life Stress Events Scale. The findings indicate that there is a positive correlation between stressful events and illness (Workman, 1982).

John Violanti, John Vena, and James Marshall conducted a retrospective investigation of disease risk and mortality among 2,376 police officers in Buffalo, New York. Officers had worked a minimum of 5 yrs between January 1, 1950 and October 1, 1979. Six hundred and sixty one of these officers died and 93% of these death certificates

were obtained. Standardized mortality ratios reveal that, in comparison to the US white, male population, officers have significantly higher mortality rates for cancer and suicide. Further, their risk of death from heart disease is positively correlated with years of police service. The researchers speculated that these risks are related to police occupational factors and accompanying lifestyle habituation, including a high stress work environment, irregular sleeping and eating habits, stress-related alcohol dependency, and lack of exercise (Violanti and Vena, 1986).

Chronic stress has been linked to the development of high blood pressure, coronary artery disease and exacerbation of conditions such as diabetes and obesity. In 2 studies in 1997 by Fiona Biggam et al, 594 and 699 police officers with a mean age 32.9 years and 35.9 years were surveyed to evaluate the sources and consequences of stress in law enforcement. The first study examined officers exposure to operational duties and the possible moderating role played by the availability of social support, negative attitudes towards emotional expression, the officer's likelihood of reporting symptoms as measured by the General Health Questionnaire and just world beliefs. Just world beliefs are defined as the acceptance that the world is a fair and just place and those who do wrong will be punished. Examination of the data revealed the most at-risk officers exhibited high negative attitude towards emotional expression, low just world beliefs, and low levels of social support.

The second study investigated the self-perceived stress and distress associated with a variety of organizational and occupational stressors. Distress was examined through self-report of symptoms of anxiety, somatic complaints, severe depression and social dysfunction. The data indicated that despite the potential for stress from exposure to adverse operational situations such as violence or death, the highest levels of

associated stress were related to organizational factors such as staff shortages, inadequate resources and poor supervision (Biggam et al., 1997).

One of the reasons that chronic stress is so harmful is that the hormones cortisol and thyroxine that are released have a very long half-life and lead to increases in overall metabolism and the level of fatty acids in the blood stream (Hyyppae et al., 1988; Sephton, 1996; Grossi et al., 1999; Beerda et al., 2000). This has been associated with increases in arterial plaque build-up leading to hypertension (McCabe et al., 2000).

As stress increases, people begin to experience impaired social functioning and relationship problems (Finn and Tomz, 1996). In 1996, David Alexander and Leslie Walker surveyed 409 spouses of police officers to assess the impact of police work on the welfare and functioning of these families. Police work was found to have an adverse impact on the family, particularly in terms of their social life due to long hours, shiftwork and canceled leave. In addition, methods used by the officers to combat stress, such as avoidance of emotion focused methods of coping, use of denial, displacement, and addictions to food, alcohol and tobacco may create additional difficulties.

Officers who are under extreme stress tend to begin to perceive the world as a hostile and unwelcoming place (Bonifacio, 1991; Quick et al., 1992; Finn and Tomz, 1996). Consequently, they withdraw from everyone, even the people who could provide social support. Workers often call in sick because they cannot tolerate the thought of having to deal with their coworkers or the general work situation (Perrier and Toner, 1984; Finn and Tomz, 1996).

Freud identified several defense mechanisms that people use when they are unable to cope with situations. These defense mechanisms preventing people from being able to objectively evaluate and cope with a situation (McWilliams, 1994). Projection,

displacement, splitting and moralization are four of the most caustic defenses as they not only prevent objectivity, but they also validate a person's belief that others are hostile and untrustworthy (McWilliams, 1994). As officers become increasingly cynical, they begin to view the world in terms of us-them dichotomies (Ansen and Colon, 1995; Violanti, 1999). Freud referred to viewing the world into dichotomies as "splitting (Valliant, 1992)." Further, cops often believe that they are right and the rest of the world is wrong this has been referred to as moralization (Thomas-Riddle, 1985; Chandler and Jones, 1979; Alexander and Walker, 1994; Ansen and Colon, 1995) The more energy that is expended in defense mechanisms such s constant cynicism and moralization, the greater the energy deficit for mental processes such as concentration, problem solving and taking multiple perspectives (Crose et al., 1992).

The strong, brave, unwavering façade of the LEO often causes people to forget the ways in which law enforcement officers are victims (Kroes, 1976; Reiser and Geiger, 1984; Sewell, 1994; Finn and Tomz, 1996; Figley, 1995; Violanti and Paton, 1999). Officers are the primary victims of psychological and physical assaults everyday, but the impact is denied. They are hit, shot at, rammed by suspect vehicles, and verbally attacked. Verbal assaults are usually not documented unless they represent viable threats of bodily harm. In a survey of reports from a mid-sized law enforcement department in Florida for the month of July, 1999 there were 53 reports filed for battery on a law enforcement officer, and three cars were rammed in separate incidents. Although the officers involved qualified for victim's assistance in most of these cases, the impact of these are often chalked up to "All in a day's work" and dismissed (Finn and Tomz, 1996). Officers have to be able to block their emotions and stay functional for the next call regardless of how much they were in fear for their life or bothered by a scene (Finn and

Tomz, 1996; Jones, 1998; Darnell, 1999). Officers are told "If you need help, ask for it." In the same breath they are also told "If you cannot deal with your emotions any better than that, you need to go get a job selling sporting goods (Goldfarb, 2001) (web page). In the context of the law enforcement subculture, LEOs know better than to show distress or ask for help (Violanti, 1981; Reiser and Geiger, 1984; Moyer, 1986; Alexander and Walker, 1994; Ansen and Colon, 1995; Violanti, 1999).

"... Every cop maintains that detachment is the key, but the truth is that he gives up a section of his soul and dies a little death at the beginning of every case. If he were truly detached, he could never see what has to be seen. The key to the thing is intimacy without emotion. Even the ones who have the quality never keep it for long. A few years on the job and you are either out of homicide or well into the process of freezing solid forever... Now and then you kill a glass of Johnny Walker Black and follow it with a .357 chaser... (Sewell, p 568)"

The law enforcement community defends against and dismisses all but the most severe stressors—critical incidents. Critical incidents are defined by police psychologists as "any situation beyond the realm of a person's usual experience that overwhelms his or her sense of vulnerability and or lack of control over the situation (Goldfarb, 2001)."

The ambiguity in the definition means that the provision of critical incident stress debriefing is left to the discretion of the department and therefore, almost never used. If the incident sufficiently bothers an officer, she or he is left to, independently, seek counseling and ask for help. Most officers will rarely experience departmentally defined critical incidents (Finn and Tomz, 1996). Nevertheless, all officers experience what the mental health and civilian community would consider "overwhelming" scenes in the form of homicides, suicides or violent rapes or domestic assaults (Finn and Tomz, 1996; Paton and Violanti, 1997; Robinson et al., 1997; Goldfarb, 2001).

Traumatic responses are speculated to differ between people who appraise situations and orient themselves toward saving others or goal achievement (Lester et al., 1985; Marshall, 1986; Burke and Deszca, 1986; Burke and Kirchmeyer, 1990; Figley, 1999). These two different orientations are very characteristic of traditional gender-role behavior, the first one being traditionally feminine (Gilligan, 1977; Gilligan, 1979). When exposed either directly or indirectly to traumatic situations people who are otheroriented tend to feel empathy, and responsibility to rescue, protect and/or provide the victim with solutions. The person who is goal-oriented deals a sense of strength, power and control and a need to succeed at providing justice (Kohlberg and Hersh, 1977; Greenglass, 1985). Unfortunately not all victims can be rescued and justice is not always served (Finn and Tomz, 1996). The result affects LEOs emotionally, mentally, physically, socially and vocationally.

In 1993, Ronald Burke and Catherine Kirchmeyer investigated the relationship between initial career orientations, stress and burnout in police officers. They applied Cherniss's (1980) primary career orientations model (self-investor, social activist, careerist, and artisan) to 586 police officers. Findings support Cherniss's hypothesis that people who begin their careers with a social-activist orientation run the greatest risk of experiencing heightened stress, reduced work standards, and poor emotional and physical well-being (Burke and Kirchmeyer, 1990).

Emotionally, LEOs often experience a sense of a loss of power and purpose in ones work leading to a sense of being burdened, resentful, rejecting, guilty, frustrated, demoralized, not in control, exhausted and "burned out" (Reiser and Geiger, 1984; Burke, 1987; Brown and Campbell, 1994; Figley, 1995). Gary Patton conducted a study aimed at gaining an understanding the impact of law enforcement work on spirituality, as opposed to religion. Three basic research questions are asked. How is spirituality affected by continuous exposure to crime, danger, suffering, and violence? Does a strong sense of

spirituality assist officers in coping with stress, and if so how? Third, what interventions might be useful in providing a holistic approach to counseling with police officers?

Qualitative data was gathered through observation, a written survey, and interviews.

Eight police officers in Huntington, West Virginia, participated in the research. The observation component included accompanying the officers on patrol for a minimum of five, eight-hour patrol shifts. Interviews were informal and loosely structured. Questions and topics for the interview emerged in the course of the time spent with the officers. This research supported the notion that law enforcement officers' spirituality is adversely affected by continuous exposure to crime, danger, suffering, and violence (Patton, 1998).

The most salient factors associated with the development of burnout include the chronicity, complexity and acuity of exposure to situations (Kroes, 1976; Burke, 1987; Pynoos and Nader, 1990; Burke, 1993; Finn and Tomz, 1996). Since the early 1980s, Ronald Burke has been conducting studies to illuminate the causes, consequences and solutions to police burnout. One of his most recent investigations evaluated a model of police burnout. This model theorizes that the following components: demographic characteristics, chronic job stressors, acute stressful events, work-family conflict and coping responses, all contribute to the development of burnout. This study was completed by 828 Canadian police officers. Ninety two percent of them were male and more than half had been officers for less than five years. The protocol included a questionnaire that measured the five components of the model and the Malasch Burnout Inventory. Packets were anonymously completed by each officer. The data indicated that: 1) demographic characteristics were weakly related to burnout, 2) chronic job stressors were consistently and strongly related to burnout, 3) acute stressful events and

work family conflict were only moderately related to burnout and 4) coping responses were only related to the burnout dimension of depersonalization.

Over the past two decades, police psychologists John Volianti, Douglass Patton and Fred Aron have identified differences in the impact of chronic stress versus critical incident stress, and supported the notion that, although critical incidents are extremely stressful, the debilitating stressors are often the seemingly innocuous daily stressors. (Violanti and Aron, 1993; Violanti and Paton, 1999). This was further supported by the study funded by the National Institute of Justice, Developing a Law Enforcement Stress Program for Officers and Their Families (Finn and Tomz, 1996).

"It probably won't be a bullet that strikes and officer down, but the effects of chronic stress" Sgt. Robin Klein, Long Beach California Police Department FBI Law Enforcement Bulletin, Volume 58 number 10, 1989.

Pynoos and Nader (1990) devised a triage method for screening victims for the development post-traumatic stress symptoms. Indicators for the severity of the traumatic reaction included: victim familiarity/similarity, current psychopathology, previous trauma within 12 months, safety concerns, and family response. The degree of unpredictability of the event, source of the traumatic experience, extent to which the event violated assumptions about the world or others, presence of manipulation or exploitation, and whether the officer was alone during the experience have also been found to affect impact severity (Anshel et al., 1997).

Behaviors of victims/perpetrators such as negative affect, resistances to intervention/thwarted efforts, psychopathological symptoms, suicidal threats and passive-aggressive behaviors, have been found to account for a large part of the variance in work related stress experienced by officers (Finn and Tomz, 1996; Figley, 1999). When these

benchmarks are considered, officers experience traumatic stress on a daily basis, not just in the course of "critical incidents"

Police Psychologist, Beverly Anderson, developed a multi-phase model for explaining how police officers integrate a traumatic event into their schema. The first phase is characterized by exposure to the crisis. Officers then move into a "period of safety." The initial incident is over--they have left the scene and done the paperwork. The third phase is characterized by assimilation or accommodation of the experience. Often this involves changing schema related to their perceptions about the world. In the fourth phase, officers successfully cope and integrate the experience, or they adopt a victim mentality and develop of a sense of futility (Figley, 1995; Anderson, 1998).

These responses are aimed at protecting the officer from becoming overwhelmed, but often interfere with communication, information processing and decision-making (van der Kolk, 1989; Bonifacio, 1991; Alexander and Walker, 1996). Changes in schema are often related to their perception of the world especially regarding issues of trust, safety, personal power, freedom/independence, and goodness of human nature (Figley, 1995; Devlin, 1997). Cynicism, pessimism and helplessness can be inferred from the observation that officers are three to six times as likely to develop addictions to substances that blunt emotions, provide a means of escape and help them sleep (Brown and Campbell, 1994; Kurke, 1995).

Since a high percentage of officers burnout within their first five years, and as cops become more stressed, they tend to have difficulty exercising appropriate judgment, police psychologists have created a developmental model that highlights the progression toward burnout when officers inadequately resolve stress. Interestingly, the symptoms officers show are very similar to those of victims with Post Traumatic Stress Disorder.

Police Trauma Stress Disorder1

Rookie
Idealism shattered
Loss of a sense of personal control
Loss of a sense of purpose

John Wayne

"Badge-heavy adrenaline junkie"
Obsessed with regaining control
Hypervigilence
Little sleep
Lose contact with civilians /
withdrawal
Sense of hoplessness about the job
Rigid in problem-solving and
concentualization

Professional Control
Depersonalization / Emotional
numbing
Loss of a sense of purpose/ increased

apathy Question the goodness of humanity Alienation/ Isolation from peers and

family
Lack a sense of accomplishment
Beginning of addictions /eating
problems/ ulcers

Burnout
Emotional exhaustion
Numbing rage
Lack of belongingness
Sense of hopelessness

Police Trauma (PTSD)
Loss of ability to function

Feelings of detatchement, frustration, guilt, disempowerment Self-consciousness about their sense of vulnerability, emotional reactions

Life threatening re-enactments Self-destructive or impulsive behavior Desire and/or plans to get revenge/justice Abrupt shifts in interpersonal relationships

Post-traumatic acting out behavior: sexual acting out, addictions, emotional overeating Radical Changes in life attitudes and personal identity

PTSD

Victimization²

^{1 (}Tve. 1995; Anderson, 1998)

According to Volianti (1993) and Blau (1994), the research done by Peter Finn and Julie Tomz (1996) and police supervisors and officers who were interviewed as a part of this initial information gathering process, LEOs are often frustrated by a lack of creativity and autonomy (Finn and Tomz, 1996; Jones, 1998; Darnell, 1999; Violanti, 1999). They are expected to conform to protocol and, although they have great control over other's lives, have little autonomy with regard to exercising their own judgements and behaviors. To date, this point is founded in observation and speculation by law enforcement professionals, but not empirically investigated.

Physically, LEOs have a much higher rate of hypertension, diabetes, obesity and tend to die seven to fourteen years earlier than civilians (Quick et al., 1992; Mccann, 1997). Daniel Ely and Richard Mostardi Analyzed psychological and physiological data from 331 male police officers and 48 male clerks in Akron, Ohio. Questionnaires were used to assess recent life changes; life assets (social support, friendships, marital relationships); and temperament. Blood chemistry and blood pressure were also assessed. Police officers had higher blood pressure, norepinephrine levels, and recent life-changes than the clerks. Increased hostility and depression scores were associated with higher blood pressure and more life changes and fewer life-assets. "Although officers on rotating shifts had abnormally elevated NE levels, even officers on daytime duty had values approximately twice the average value reported in the literature (Nachreiner et al., 1995)."

Ronald Burke surveyed 522 police officers (aged 21-43 yrs) to examine the relation of career stage to work experiences and satisfactions. Five career stages were considered: less than 1 yr, 1-5 yrs, 6-25 yrs, 16-25 yrs, and over 25 yrs in law enforcement. Officers with more than five years of service reported a more negative work

setting, greater stress, greater burnout, more work-family conflict, and more sick days in the preceding 6 months. There was also a negative correlation between duration in law enforcement and health (Burke, 1989).

Law enforcement officers experience a much higher rate of divorce, family and interpersonal problems (Niederhoffer et al., 1978; Burke, 1989; Esposito, 1989; Burke, 1993; Ansen and Colon, 1995). According to records from police employee assistance programs, it is estimated that between 37 and 68% of LEOs experience serious marital difficulties and nearly 100% of officers expressed that police work had a negative impact on their families (Ansen and Colon, 1995; Kurke and Scrivner, 1995). In a survey of 553 police officers and their spouses, 41% of male officers and 34% of female officers reported experiencing violent assaults in their marital relationships and over 1/3 of wives of officers reported violence. In addition, the divorce rate for officers was found to be between 66% and 75%, and 20% to 30% of the participants reported abusing alcohol (Ansen and Colon, 1995). In addition, several reports have indicated that over onequarter of children of LEOs experience mental distress (Esposito, 1989; Violanti and Paton, 1999). In one study, Carol Esposito investigated how occupational stress experienced by police officers affected their teenager's psychosocial adjustment and perception of the family environment. Twenty-five male police officers from several police departments and twenty-five of their teenagers, ages 12 through 18, participated in this study. Police officers completed a General Information Questionnaire; the Maslach Burnout Inventory, the Family Environment Scale (Modified), the T-Anxiety scale of the State-Trait Anxiety Inventory and a Personal Questionnaire. Their teenagers responded to a General Information Sheet, the Piers-Harris Children's Self-Concept Scale, the Family Environment Scale (Modified), and the Reynolds Adolescent Depression Scale.

A significant positive correlation was found at the .01 level between the degree of personal accomplishment of police officers, and the perception family cohesion by their teenagers. Significant relationships were also found between police officers' level of trait anxiety and their teenagers' perception of family conflict; and between the police officers' and their teenagers' perceptions of the family environment. Qualitative data from the police officers and their teenagers gave strong evidence for the impact that stress experienced by police officers has on their family, specifically, their children (Esposito, 1989).

Socially, LEOs withdraw from civilians and often begin to perceive them as "outsiders" and the "enemy" (Thomas-Riddle, 1985; Bonifacio, 1991; Ansen and Colon, 1995; Finn and Tomz, 1996). They quit engaging in non-law enforcement activities, at first to focus on righting the wrongs of the world, but eventually, simply to avoid interacting with anyone at all (Perrier and Toner, 1984; Reiser and Geiger, 1984). As LEOs move from being an idealistic rookie to realizing the hard realities of the world and police work, they also lose a sense of purpose (Stradling et al., 1993; Anderson, 1998). They become increasingly rigid in their definitions of right and wrong and they become increasingly intolerant of faults and mistakes in others. One of the earliest discussions of this phenomenon was lead by Ernest Chandler and Claude Jones on 1979 in their book "Cynicism: An inevitability of police work?" Through their work with officers, they observed that constant negative stimuli appeared to influence the officer's personality and make him or her vulnerable to becoming more cynical toward humanity and its processes than persons in any other occupations. John Volianti and his colleagues pursued this theory and investigated the frequency with which officers were cynical and the impact this had on overall stress levels. Five hundred officers completed the questionnaires for

this study. The results indicated that subject's attempts to cope with stress by being cynical did not lessen stress and this coping failure was related to an increased use of alcohol (Violanti et al., 1985).

Vocationally, as LEOs become progressively stressed, their reactions turn to anger at the department, a sense of entitlement and reduced morale (Hart and Wearing, 1995; Finn and Tomz, 1996). The result is increased absenteeism and turnover, reduced quality and quantity of work while on duty, and increased rebellion and instigation of feelings of unrest among teammates (Hageman, 1982; Speilberger and Reheiser, 1994; Greene and Nowack, 1995; Cartwright and Cooper, 1997).

General Organizational Sources of Stress

There are many things that have been identified which cause work-related stress. Industrial/organizational psychologists assert that work must represent a mental challenge, provide physical and financial security, provide a sense of purpose and belonging and contribute to the attainment of vocational goals (Kahn and Byosiere, 1991). In addition, the Effort-Reward Imbalance Model suggests that rewards for performance must be adequate and at least proportional to the amount of effort exerted to attain those rewards. When one or more of these qualities is lacking, work becomes stressful (Kahn and Byosiere, 1991; Keita and Sauter, 1992; de Jonge et al., 2000). Jan de Jong and associates did one study assessing the validity of the Job Demand-Control (JD-C) Model and the Effort-Reward Imbalance (ERI) Model on employee well being. The sample consisted of 11,636 employed Dutch men and women (aged 16-68 years). Variables such as job sector, demographic characteristics and managerial position were controlled. Employees reporting high job demands (i.e., psychological and physical demands) and low job control demonstrated elevated risks of emotional exhaustion,

psychosomatic and physical health complaints and job dissatisfaction. The correlations were generally stronger in employees reporting both high (psychological and physical) efforts and low rewards (i.e., poor salary, job insecurity and low work support). Finally, when both job stress models were simultaneously adjusted, high efforts and low occupational rewards were stronger predictors of poor well being than low job control. The findings did not significantly differ as a function of gender or age. Another study that evaluated the moderating influence of socio-emotional and organizational support and police performance. Results from the three hundred and eight officers surveyed indicated a strong correlation between performance and job satisfaction and the fulfillment of their needs for esteem, approval and affiliation (Armeli et al., 1998).

Although organizational stress emanates from people's occupation and/or organization, it impacts every area of people's lives. Many authors have identified organizational factors that contribute to the development of stress and burnout.

Nevertheless, these models have been unable to explain why, when exposed to the same conditions, some people burnout and others do not. Several models have been proposed to understand the sources and impact of work stress and the burnout process. Ronald Burke (1986) elaborated on the work-stress model proposed by Cherniss in 1978. He added the dimension of family stress as contributing to overall burnout. In 1991, Kahn and Byosiere proposed a conceptual model for understanding organizational stress that added the appraisal process as an integral part of the stress process in an attempt to explain differential impact of stressors across people (Kahn and Byosiere, 1991).

In an effort to protect people and their rights, officers often make decisions unpopular decisions (Finn and Tomz, 1996). They are made responsible for the safety and wellbeing of the public, but their efforts are repeatedly thwarted by: victims who

drop charges, supervisors who try to make decisions without actually being at the scene, laws which seem to be written in favor if the defendants, prosecutors who refuse to prosecute and lack of authority to make victims seek help (Kroes, 1976; White et al., 1985; Burke, 1987; Brown and Campbell, 1994; Ansen and Colon, 1995). "[Although] stressors such as danger are often assumed to be the primary causes of police stress, organizational stressors, [such as] lack of social and administrative support, and limited participation in decision making, are mentioned more often by police officers as their primary source of frustration (Alexander, 1999)."

Adding to their sense of frustration and helplessness is the fact that expectations placed upon LEOs are often unrealistic "After 20 weeks of training, all of a sudden, you are the protector of the innocent (Finn and Tomz, 1996). " In the course of a twelve-hour shift, on average, an officer will respond to more than 20 calls for service, and more than half of them will require a written report (Darnell, 1999). The situations that require intervention by law enforcement are often complex. Nevertheless, with the given call-load, officers are expected to spend no more than 15-20 minutes on any given call (Darnell, 1999). Although the expectation is that officers ameliorate the problem, very little can actually be done in the allotted time. Many officers lament that they could do so much more to help if they just had "a little more time (Finn and Tomz, 1996)." Part of the time constraints related to bureaucratic red tape and the "chain of command" often make the wheels of justice painstakingly slow (Picore, 1997). This increases LEOs sense of frustration because the prevailing sentiment seems to be "hurry up and wait (Wood, 1982; Brandt, 1993)."

Law enforcement officers are required to have a high school diploma and graduate from a 1000 clock-hour (6 month) academy (Meadows, 1997). In this time they

are trained in: defensive tactics, firearms/weapons, defensive driving, legal aspects of policing, state laws, introduction to patrol, first-responder/first-aid, suicide/crisis intervention, substance abuse assessment, working with people with mental and/or physical disabilities, communication skills, domestic violence intervention, ethics, physical fitness, report writing, interrogation, community relations, human diversity, problems facing juveniles and the elderly, intro to human behavior, stress management, criminal profiling, recognizing manipulation and deception, and observational skills and techniques. In many academies, law enforcement officers, not professionals who are trained in the specific field, for example, suicide/crisis intervention, teach classes.

Despite the increasing understanding of the impact of stress on officers, most of the time is devoted to "high liability" activities that are perceived by the academy to be important (i.e. defensive driving, legal aspects, firearms) and only cursory attention is given to interpersonal aspects of the job (i.e. stress management, crisis intervention, hostage negotiation) (Picore, 1997).

Also, techniques, technology and laws are constantly changing (Brown and Campbell, 1994). These changing laws and precedents dictate what they and cannot do. Officers are expected to be just as current in their knowledge of the law as most lawyers (Darnell, 1999).

In addition, to heavy intellectual demands, officer's sense of creativity and problem solving abilities are often thwarted by extreme time constraints and a heavy call load, which often prevents them from engaging in any self-initiated work or attempting to initiate non-traditional solutions to problems (Hart and Wearing, 1995). Regardless of whether the "traditional" solution seems most appropriate, officers are strongly discouraged from exercising any autonomy or flexibility. Many times, officers are told to

only handle their calls, and then find somewhere to sit and wait for the next call (Violanti,

Employees face many physical stressors with respect to the conditions of their working environment and shift work. Law enforcement officers have the added stress of hypervigilance due to a constant lack of safety (Robinson et al., 1997; Anderson, 1998). The physical environment for police work varies dramatically and rapidly. Officers can be writing a report in their patrol car one minute and chasing a suspect, on foot, through a swamp the next. Since much of the LEO's day is spent outside, the temperature, the amount of light, and weather, impacts them greatly. General space and ergonomic factors related to working out of a vehicle also contribute to LEO's physical stress.

Shift work is another factor that has been demonstrated to contribute to physical stress in employees, not only LEOs, but also in the general workforce. Shift work disrupts the natural sleep cycles of employees, which prevents them from getting the quality and often quantity of sleep they need (Violanti and Aron, 1994; Nachreiner, et al., 1995; Alexander, 1999). When living in a nine-to-five world, it is nearly impossible to keep their sleep schedule constant for the entire 30 days required for the body to adjust to a different sleep-wake cycle (Alexander and Walker, 1996).

In addition innocuous stressors such as space and general comfort, LEOs constantly encounter threats to their safety through frequent exposure to communicable disease and outright physical assaults (Kroes, 1976; Reiser and Geiger, 1984; Anshel et al., 1997). Social stressors can be described as those things that inhibit a person from forming and maintaining, or wanting to form and maintain meaningful relationships with others (Crose et al., 1992). This desire or ability to form and nurture relationships is

impacted not only by the person's physical and emotional availability, but also by their perceived goodness, trustworthiness and status (Bonifacio, 1991; Ouick et al., 1992),

Beginning in the academy, Law Enforcement Officers are indoctrinated into their own impenetrable subculture that is characterized by cynicism and rigid us-them dichotomies (Ansen and Colon, 1995). Julie Ansen and Israel Colon compiled a list of some of the assumptions of police subculture which include: people are not trustworthy, experience is better than abstract rules, you must make everyone respect you, everyone hates a cop, the legal system is untrustworthy and useless, police make the best decision about guilt or innocence, police must appear respectable, the major jobs of cops are to prevent crime and enforce laws and stronger punishments would deter criminals (Ansen and Colon, 1995).

"Us" represents the "good guys" and "them" represents the bad guys (Colegrove, 1983). As LEOs are exposed to increasingly diverse situations, more and more people take on the characteristics of "them," and "us" becomes increasingly exclusionary (Chandler and Jones, 1979; Colegrove, 1983; Reiser and Geiger, 1984; Finn and Tomz, 1996). In their book, Stress and Well-being at Work, James Quick and associates discuss this phenomenon. According to them, peoples' perceptions of their environment are a powerful determinant of their behavior and the way they attribute meaning to events. Beliefs are created through the integration of past experiences and current observations into schema. Schema can be considered multidimensional, descriptive memories of people's perceptions of situations. These perceptions represent general abstract rules and relations among events and reflect people's beliefs about the situation. According to this theory, people's schemas about their job, supervisors and subculture construct their subjective reality. Each new situation is interpreted and assigned meaning through these

schemas, in order to assign meaning. There is a continuing reciprocal interaction between people and air environments. Therefore not only might the environment produce heightened anxiety that anxiety may produce changes in the perception of the environment. That is the environment may be perceived as more hostile. For instance, some officers begin to see every 18-24 year-old African-American male as being one of "them (Darnell, 1999)."

Inevitably LEOs will encounter criminals who they initially appraised as belonging to the "us" group, for instance, corrupt cops. This information conflicts with the current schema that the officer has, that is, cops are law-abiding. Often, this information is overgeneralized and whole groups of people are moved over to the "them" category based on superficial demographic characteristics (Slover, 1998). Eventually, no one is left in the "us" category except other suspicious and jaded officers who reinforce their skewed notions about people and the world (Ansen and Colon, 1995).

Officer's who work midnight shift also experience involuntary isolation as a result of being awake at night in a daytime culture. They are often unable to form meaningful relationships with people who share similar interests outside of police work due to lack of availability (Maynard and Maynard, 1982; Alexander and Walker, 1996; Finn and Tomz, 1996). Although this is not viewed as a major stressor, it limits LEO's time with their family, discourages them from developing hobbies and variety in their life and reduces the possibility of positive interactions with others.

Cultural stereotypes and prejudices also serve as social stressors (Finn and Tomz, 1996). Many subcultures have very strong feelings about LEOs. Officers have to bear the burdens associated with wearing the uniform. For example, many officers are

perceived as being impulsive, overly aggressive, racist adrenaline junkies (Brown and Campbell, 1994; Finn and Tomz, 1996).

Role conflict or poor interpersonal relationships between teammates or with a supervisor provide a significant source of stress (Hirsch, 1987; Dhillon, 1989; Finn and Tomz, 1996). Paramjeet Dhillon investigated the relationship between officers' perception of occupational stress and job-satisfaction. One hundred and seventy six male police officers (aged 20-52 yrs) from different organizational levels were surveyed. Job satisfaction and occupational stress were negatively related, and job satisfaction was also negatively related to perceived stress on 4 job-related variables: under-participation, role ambiguity, powerlessness, and role conflict.

David Brandt surveyed 130 officers to determine their perception of sources of social stress. He found that dealing with superiors and subordinates, communicating with management, family problems, and psychosocial situations was rated as significantly more stressful than work-related stressors. There results are consistent with the concept of social distress as stress generated by the social system in which the individual functions (Brandt, 1993).

Many officers spend more time at work than they do with their family and friends, so interpersonal stress at work represents a significant issue. Regardless of who the conflict is with, the paramilitary structure often constrains many officers from voicing concerns. Resentments fester and morale decreases (Brown and Cooper, 1996; Anshel et al., 1997; Jones, 1998). James Quick and associates supports this theory and adds that certain types of interpersonal stress, such as: people taking credit for others achievements, exchanging favors with people of higher rank, game playing to obtain

power/authority and getting ahead by knowing the right person, are perceived as more troublesome for women officers (Ouick et al., 1992).

Role conflict between teammates can occur when two LEOs of the same rank, but with different duties and agendas are assigned to work the same case. Likewise, when officers perceive that some people are not doing their share of the work, unrest ensues. Role conflict can occur with a supervisor when LEOs are believe that a situation should be handled one way and a supervisor second-guesses them and orders it to be handled another way. The officers are put in the double bind of being charged with doing the best thing for the victim and the case while also obeying their supervisor.

Finally, poor relationships with "customers" represent the final area of social stress (Violanti and Aron, 1993; Brown and Campbell, 1994; Violanti and Aron, 1994; Hart and Wearing, 1995; Brown and Cooper, 1996; Anshel et al., 1997; Biggam et al., 1997). As mentioned earlier, as officers become increasingly burned out, their beliefs about people and the world become extremely suspicious and negative. As a result, LEOs often begin to perceive everyone as threatening and treat them as suspects and criminals.

Law enforcement officers derive their sense of purpose either by restoring justice and order or by helping people who are unable to help themselves. As their efforts to achieve these goals repeatedly fail, officers develop a sense of apathy, hopelessness and helplessness (Sewell, 1994; Yates and Pillai, 1996; Picore, 1997; Anderson, 1998). Brian Sewell describes this process in terms of the experience of a homicide investigator. These officers carry the burden of finding justice for those who can no longer speak for themselves and feel like a part of them has died when they cannot solve a case. In 1983, Susan Colegrove used semi-structured interviews to investigate sources of burnout in

female police officers and found a strong positive correlation between length of service and burnout. In addition, she found that officers' cynicism increased substantially after they completed their one-year initial probation and officers who entered law enforcement to enforce the law were much more dissatisfied with their job than were the officers who chose to enter law enforcement for social service reasons (Colegrove, 1983).

Further, often laws and situations will conflict with a person's value system (Pendleton, 1983). For instance, some officers may believe that there is never a reason for arresting the woman in a heterosexual domestic violence incident. Nevertheless, the law clearly states that the primary aggressor, regardless of gender, must be arrested. Officers are then faced with the ethical dilemma of abiding by the law or their personal values. In 1998, Francis McCafferty published several articles describing the corruption process in law enforcement and it's relationship to job stress and burnout. In these articles, he asserted that in the closed subculture of law enforcement, the following sources of stress may contribute to the development of corruption in law enforcement: "police discretion", the code of silence, lack of an administration with integrity, political agendas, racism and sexism, occupational stress and deviance (McCafferty et al., 1998).

An often-overlooked component of law enforcement stress is that of the political nature of the organization itself. A politician, who may or may not be re-elected, heads many offices. There is constantly talk of creating different divisions, the addition and loss of grant-funded positions and the threat of getting transferred to another division. This lack of job security has been related to stress that, as stated earlier, leads to reduced job and life satisfaction, low self-esteem and poor physical health.

As stated earlier, law enforcement officers have higher rates of physical ailments, absenteeism and turnover than the general population (Tang and Hammontree, 1992; Greene and Nowack, 1995). The resulting staff shortages also contribute to stress, as crime does not care if there is minimum staffing (Greene and Nowack, 1995; Finn and Tomz, 1996; Biggam et al., 1997; Armeli et al., 1998).

Law enforcement, in particular, is a profession with very few rewards. Criminals sometimes go free. Victims fail to seek help. The pay is low. The work is dangerous. Officers are constantly making unpopular decisions and the hours are terrible (Finn and Tomz, 1996; Picore, 1997). In addition, law enforcement agencies are notorious for keeping files in which there are often only complaints and reprimands. The good things LEOs do like self-initiated work, successful case resolutions and positive citizen comments are rarely even noted in many departments. In addition, the average pay for law enforcement officers is low, in Florida for example, it is \$23,000. Consequently, officers are often forced to work overtime details or second jobs in order to make ends meet. This second job cuts into the time LEOs need to recuperate (Kroes, 1976; Gaines and Jermier, 1989).

Employees are often frustrated by their supervision due to the inability to participate in decision making, lack of feedback or appreciation from supervisors, inability to provide feedback to supervisors, a lack of instrumental or socio-emotional support and being put in apparent double-binds (Stotland and Berberich, 1986; Evans and Coman, 1993; Brown and Campbell, 1994; Armeli et al., 1998). Supervisors in law enforcement are often inadequately trained to manage people. They know what they have done and how they have been taught, but there is no underlying theoretical basis that provides continuity to what they do (Kurke and Scrivner, 1995; Finn and Tomz, 1996). Law enforcement supervisors often fall into one of two extreme categories, either

overbearing or completely detached. With little training in human relations, they often have difficulty negotiating the different needs of the people whom they supervise.

Opportunities for advancement and training are often limited and highly competitive (Finn and Tomz, 1996). In the past ten years, training standards for law enforcement officers has increased exponentially. Five years ago, the academy was two months long and only a high school diploma was required to hold any position.

Currently, the academy in Florida is six months long and, in many departments, officers must hold an associates degree to become a sergeant and a bachelor's degree to advance to lieutenant or above. The officers who are currently on the road were not grandfathered in, and cannot find the time to go to school part-time for eight-years. Consequently, they are stuck--most of them have reached the top of their pay grade and have no hope of any change.

Law enforcement agencies are often resistant to change; likewise, they are often extremely unwilling to hear concerns voiced by employees. Part of this resistance may be an artifact of the para-military organizational structure (Finn and Tomz, 1996). Other factors, which have been observed by police psychologists and counselors, that inhibit employees from voicing concern are: 1) a sense of futility--nothing can or will ever change, 2) a fear of being seen as a trouble maker, 3) a sense of apathy and 4) the arduous process of going through the chain of command (Finn and Tomz., 1996; Jones, 1998).

Another source of stress is that officers literally only have what resources they have on their person or in their car. In many sheriffs' departments, the closest back-up unit is more than 5 minutes away. Officers are expected to respond to any call from the delivery of a premature baby to a murder in progress and handle it (Brown and Campbell, 1994). This concept of the law enforcement officer as being a "Jack of all trades" has

been referred to as role ambiguity. Officers are supposed to "serve and protect." That can mean anything from changing a tire to rescuing a hostage. They never know when the next priority call will occur. Often situations are not "text-book" leaving officers to make judgements on their own. Some studies have reported that up to 30% of officers report frequently encountering conflicting duties (Keita and Sauter, 1994; Kurke and Scrivner, 1995; Brown and Campbell, 1998).

Many attempts have been made to identify major sources of stress facing law enforcement officers. Organizational management and policies have constantly been found to rank high on the list (Evans and Coman, 1993; Violanti and Aron, 1993; Violanti and Aron, 1994). In addition, several types of calls have been found to produce high levels of stress: working a sudden death, arresting a violent person, dealing with victims of violence, making death notifications, searching for a missing person, answering a call for emergency back-up, testifying in court, football duty, dealing with victims of sexual violence, crowd/riot control (Hillgren et al., 1976; Speilberger, 1981; Alkus et al., 1983; Stotland and Berberich, 1986; Joseph, 1989; Brown and Campbell, 1994; Speilberger et al., 1994; Finn and Tomz, 1996).

Coping and Appraisal Styles Used to Deal with Stress

People encounter many different stressful events daily. Three primary appraisal dimensions, threat, challenge and centrality, have been found to be significant predictors of the overall impact of stressfulness of events and duration in law enforcement affects officers' perceptions about whether they can cope with situations (Anshel et al., 1997). This information was the result of a two-part study conducted in 1997. The first study used 39 officers and identified 17 acute stressors facing law enforcement officers. The second study used the Stress Appraisal Measure to evaluate the effect of law enforcement

experience on the appraisal of these stressors. Ninety seven officers participated in study two. Work-related stressors rated highest for overall stressfulness have repeatedly been found to be "facing and unpredictable situation, dealing with domestic disputes, facing a situation with the possibility of injury and dealing with a person with a weapon (Anshel et al., 1997; Robinson et al., 1997).

Several methods of coping have been proposed by Charles Carver, Michael Scheier and Jagdish Weintraub. These can be categorized, generally, into problem-focused coping, emotion-focused coping and avoidant or defensive coping (Carver et al., 1989). Peter Vitaliano and colleagues conducted a study to evaluate the relationship between depression, coping and the perceived changeability of a stressor. Seven hundred and forty six participants completed questionnaires including the Beck Depression Inventory and the Symptom Checklist-90. Results indicated that problem focused coping and depression are negatively related when stressors are appraised as changeable, but were unrelated when stressors are perceived as unchangeable. Emotion focused coping positively correlated with depression when events were perceived as changeable (Vitaliano et al., 1990).

George Patterson (1997) used a cross-sectional survey to investigate the effects of social factors, gender, race, rank socialization and status within the police department, on exposure to stressful occupational and personal events; techniques officers use to manage stress; and the efficacy of those techniques. A sample of 233 officers from a 646member police department in a mid-sized city located in the northeastern United States completed the Police Stress and Coping Questionnaire (PSCQ), the Ways of Coping Questionnaire, and items measuring psychological distress. Police experience buffered the effects of stressful field events. Emotion-focused strategies buffered the impact of stressful

personal events, but neither buffered against organizational stressors. Gender, rank and socialization affected exposure to stressful organizational and field events, but not personal events. Women were found to interact with citizens in a more considerate manner and were more emotionally exhausted than men. Men were found to depersonalize the situation in order to defend against the potential emotional impact. The generalizability of this study was compromised by the use of officers from only one agency (Patterson, 1998).

Another study done by Maryanne Christie and Kenneth Schultz (1998) indicated that, in the civilian sector, men and women differed on few coping responses; however, the results did suggest different trends in the effectiveness of different coping styles for men and women due to differing appraisal styles of stressors in the workplace (Christie and Shultz. 1998).

In 1994, David Alexander and Leslie Walker surveyed 1000 officers. Seventy six percent of the participants returned valid questionnaires. The results confirmed previous research that indicated that officers use defenses such as denial, projection, displacement and avoidance of the situations through delegation of work, taking sick leave and use of psychotropic medication are the most frequently used methods of dealing with distress. Self-medication through the use of "comfort food," alcohol, over-the-counter medications and smoking were also found to be frequently used. The use of prescribed medications or professional help was rarely used and perceived as a sign of weakness within this subculture (Alexander and Walker, 1994).

Gender and Gender Role Variables and the Perception of Stress

Beginning in the 1960s, the definitions of women's roles began to radically change (Ellman and Taggart, 1993; Cafferata et al., 1997; Holt and Ellis, 1998).

Traditional gender roles associate femininity with expressiveness, emotionally supportive responses, nurturance, communion, contact, openness, cooperation and feeling, subjectivity and dependence (Blechman and Brownell, 1998). Masculinity is characterized by instrumentality, goal-directedness, accomplishment, agency, concern for self, self-protection, self-assertion, isolation, mastery and the repression of feelings (Blechman and Brownell, 1998).

As women's roles changed, they expanded to allow women more opportunities, but did not redistribute "traditional" female activities such as homemaking (Bannerman, 1996). The stress experienced as a result of this was coined "The Super Woman Syndrome" and has been linked with the development of depression, burnout and a host of other physical and mental ailments (Keita and Sauter, 1994).

Contemporary women are, in many cases, still expected to conform to genderrole stereotypes, but are also expected to be successful professionally (Bogg and Cooper,
1994; Cafferata et al., 1997; Blechman and Brownell, 1998; Greenglass et al., 1998).

When women choose to enter law enforcement, they are entering into a profession that is
well known for its traditional masculine gender role behaviors and attitudes. Female law
enforcement officers in many departments are expected to conform to this. One of the
many questions that arises is whether female law enforcement officers coping and
appraisal styles change to match the masculine gender role. The following section
explores the different types of stressors experienced, the impact of those stressors and
ways of coping as it relates to officers gender and/or gender-role. In one article,
Doryanne Lebe discusses female ego ideal conflicts that frequently emerge in women
during their 20's, 30's, and 40's as they make decisions concerning motherhood and
careers. One area of adult internal conflict that is addressed is the continued existence of

the superwoman syndrome, the belief that women's employment should not diminish their homemaker responsibilities (Lebe, 1986).

Although work has the benefit of leading to greater financial resources, social resources and improved mental and physical health, it also has the potential to increase distress simultaneously negating any benefits. The sources and effects of this distress are often different for men and women (Bogg and Cooper, 1994; Guppy and Rick., 1996; Roxburgh, 1996; Almeida and Kessler, 1998). Some studies have revealed that both genders perceived equal levels of stress; nevertheless, the types of stressors, effects of those stressors and ways of coping have been found to differ (Brown and Fielding, 1993; Ross and Altmaier, 1994; Almeida and Kessler, 1998).

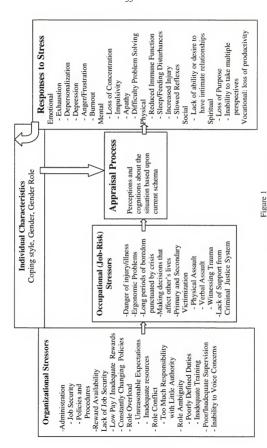
For instance, in 1998, David Almeida and Ronald Kessler examines gender differences in psychological distress by assessing 166 married couples experience of daily stressors and psychological distress. Gender differences in daily distress were attributable largely to women experiencing more onsets of distress episodes rather than being more likely to continue in a distress state from one day to the next.

In a study done by Jacqueline Cimbura in 1999, the self-reported levels of stress and coping and the relationship to gender were examined in 102 newly hired police officers. The Occupational Stress Inventory measured work related stress, psychological strain, and coping resources. Results were examined both independently and in relation to scores on the Minnesota Multiphasic Personality Inventory (MMPI) and the 16 Personality Factors Questionnaire (16PF). Fifty-three percent of the participants indicated some work-related stress, and 17% indicating that the levels of work-related stress were significant. Regarding coping, 25.5% of the sample experienced mild deficits in coping resources while 6.9% indicated significant deficits. Participants' personal

coping scores were significantly negatively correlated with work related stress and psychological strain categories.

On the MMPI-2, significant negative correlations were found between the K scale (Subtle Defensiveness) and both the Occupational Stress and Psychological Strain scales. Gender differences were examined in regard to scores on both the stress inventory and the measures of personality. The results indicated that male police officers identified more work-related stress than did the female officers. Male police officers also obtained significantly higher scores on Scale 1 (Hypochondriasis), and Scale 2 (Depression). Female officers scored higher on Scale 5 (Masculinity-Femininity) (Cimbura, 1999).

In 1992, considerable activity focused on acknowledging the mind-body connection and the systemic and cumulative effects of stress in all areas of life (Crose et al., 1992; Myers, 1992). In order to better account for the variations in the stress process between male and female LEOs, the model proposed by Kahn and Byosiere (1991) has been elaborated upon to create a comprehensive multidimensional systems model which defines individual differences according to gender, gender-role and coping skills (Figure 1).



Comprehensive Stress Model

In 1994, Charles Spielberger published, The Job Stress Survey: Measuring gender differences in occupational stress. In this article, he lists many studies establishing the connection between job stress and absenteeism and poor productivity. He states that \$2800 per employee per year is spent due to reduced productivity, absenteesim and turnover and 600,000 workers annually are disabled due to psychological conditions that cost over 5.5 billion dollars annually.

Many studies have found significant gender differences in the perception of the severity of the following stressors: low salary, lack of opportunity for advancement, lack of participation in policy decisions, competition for advancement, negative attitudes toward organization, critical on-the-spot decisions, noisy work areas, poor or inadequate supervision, covering for another employee, conflict between departments, performing tasks not in job description and insufficient personal time. It was, therefore, concluded that gender was extremely important in determining how different workplace stressors are perceived. Seventeen hundred and eighty-one adults' responses on the Job Stress Survey were compared. Previous literature had failed to find gender differences in stress related symptoms or general clusters of stressors. The Job Stress Survey was constructed to evaluate specific stressors instead of general clusters. This study found significant gender differences in the perception of the severity of the following stressors: low salary, lack of opportunity for advancement, lack of participation in policy decisions, competition for advancement, negative attitudes toward the organization, critical on-thespot decision making, noisy work area, poor or inadequate supervision, covering for another employee, conflict between departments, performing tasks not in job description and insufficient personal time (Speilberger et al., 1994).

Finally, in a mail-survey study of 457 veterinarians done by Barbara Welsch, gender differences in job stress, burnout, job satisfaction and coping style was investigated. Participants included 205 males and 252 females who completed the Health Professions Stress Inventory (HPSI-T), the Burnout Measure (BOS), the Coping Styles Questionnaire (CSQ), a measure of Job Satisfaction (SAT), a single question assessing overall Life Stress and a demographics questionnaire. Moderate correlations between job stress and burnout and between job stress and job satisfaction were found. Females reported significantly higher levels of job satisfaction, job stress and burnout than their male colleagues. These gender differences remained when controlling for other demographic variables. Based on the results of the CSQ, males used significantly more rational and detached coping, and females used significantly more emotional coping. Frequent usage of emotional coping was related to an increase in the positive association between job stress and burnout in males, but not females. A striking outcome was that females perceived nearly half of the assessed stressors (16 of 35 assessed on the HPSI-T) as significantly more stressful than did the males. Males and females did not significantly differ in their perceptions of frequency of occurrence of the assessed stressors (Welsch, 1998).

Gender differences in coping have consistently been found. Males are more problem focused and actively manipulate their environment, while women are more emotion focused and actively modify their internal (emotional) environment (Thoits, 1991; Sigmon et al., 1995; Skues and Kirkby, 1995; Hurst and Hurst, 1996; Yee et al., 1998; Stein and Nyamathi, 1999). Men tend to be more approving than women of coping strategies aimed at maintaining an unruffled appearance, whereas women are more

approving of strategies aimed at risk reduction and that reflected an orientation to caring for the greater good (Yee et al., 1998).

George Patterson (1997) investigated the effects of social factors, gender, race, rank socialization and status within the police department, on exposure to stressful occupational and personal events; techniques officers use to manage stress and the efficacy of those techniques. Results showed that experience within police work and problem-focused coping helped buffer the effects of stressful *field* events, but not organizational or personal events. Emotion-focused strategies buffered the impact of stressful personal events. Significant gender differences in coping styles among law enforcement officers were not found. Nevertheless, gender, rank and socialization were found to affect exposure to stressful organizational and field events.

Not only are the stressors perceived and coped with differently by men and women they also have different effects. Women tend to evidence emotional exhaustion where men are found to depersonalize. Part of this may be due to different approaches to policing. Women tend to approach situations from a more empathetic view point and try to help find solutions to the larger, systemic problem; whereas, men often solve the immediate crisis by interrupting the illegal behavior (Patterson, 1998).

Gender and/or gender role also impacts problem solving skills. When women LEOs were divided into neutral, semi-masculine, feminine and mixed gender-roles, their patterns of assigning priorities in work-related situations changed and were consistent with traditional gender-role orientations (Wexler, 1985). That is, women with more masculine gender-roles tended to solve problems based upon the "rules" in an effort to fix. Women with more feminine gender-roles tended to focus on the situation, the person variables and try to sole the problem so the victim was taken care of.

Role ambiguity was mentioned as a source of stress within organizations, but it plagues women on many levels due to the multiplicity of roles that they represent, and the rapidly changing nature of such roles (Quick et al., 1992; Brown and Campbell, 1994; Greenglass et al., 1998; Blechman and Brownell, 1998). Women working in a maledominated field face the added burden of having to negotiate the amount to which they can maintain their preferred gender-role and be accepted (McBroom, 1992; Bannerman, 1996).

In 1985, Judie Wexler interviewed twenty-five female police officers and grouped them based upon four different role-adaptations (Wexler, 1985). The neutral-impersonal style was characterized by business-like interactions. They expected to be treated as equals and to earn respect through hard work. The feminine style was characterized by traditional female gender-role stereotypes: concern with appearance, submissiveness and overly-sexual interactions with male co-workers. These officers expected to be protected and given special treatment by their male counterparts. LEO with a semi-masculine style did not expect to be treated as equals, but worked hard to do a good job. They tended to approach situations differently due to their different, but equal abilities. Finally, there was a mixed group who, despite wanting to be treated as equals and not receive special help, communicated in ways that had sexual overtones. Women with semi-masculine and feminine styles were not characterized as good police officers due to their willingness to accept extra help from male officers or allow them to take over certain aspects of a situation. Women with semi-masculine and neutral-impersonal styles were more integrated into the work-group, but reported much worse interpersonal relationships with their colleagues (Wexler, 1985).

In 1992, Patricia McBroom used semi-structured interviews to survey forty-four working women in New York and San Francisco from the fall of 1981 to the spring of 1982. The interviews yielded data that was analyzed for patterns on how women integrate the worlds of men and women. The data suggested that the attempt by women to straddle the masculine role models of the workplace leaves many with a feeling of discontent (McBroom, 1992).

Symptoms of distress in women differ in the amount of anxiety, depression and sleep disturbances and it is been found that upwards of 40% of female managers use tranquilizers and over-the-counter medications to relieve tension (Quick et al., 1992; Geick, 1998). Men on the other hand, report more symptoms of hypertension, poor physical condition and gastric difficulties and a 30% use of tranquilizers and over-the-counter remedies for anxiety and tension (Quick et al., 1992).

Socially, co-worker support buffered the impact of burnout in both men and women. It led to lower emotional exhaustion in women, but in men, co-worker support led to higher sense of personal accomplishment (Greenglass et al., 1998). In addition to interactions with coworkers, interpersonal interactions with the public have been demonstrated to differ between white men and women and minorities who experience more positive interactions with the public than white, male LEOs (Morris, 1996).

Regarding officer's personal, social relationships, women tend to keep and interact in a more traditionally female gender-role with their civilian friends (Wexler, 1985; Bannerman, 1996).

Women's orientation toward care and compassion is also observed in the fact that female professionals have a difficult time not feeling the responsibility for the maintenance and emotional well-being of the family (Skoe, 1994). Given the time spent

and cohesiveness of police patrol units, women LEOs may feel an obligation for the maintenance and emotional well being of their occupational family. This supports Gilligan's assertion that the ethic of care plays a role in the development of women, and the care ethic may be more important to women in terms of their identity and more relevant than justice based thought (Gilligan, 1977; Skoe, 1994).

In addition to different patterns of relating to each other, the impact of crime may have very different consequences for women. When the law enforcement experience is viewed in terms of the triage assessment proposed by Pynoos and Nader (1990), women are often bombarded by situations in which they bear some similarities to the victims such as demographics or motherhood. As stated earlier, women may feel a desire to care for the victim who does not want, or know how to accept, help.

When spirituality is defined as one's sense of ethics and purpose in life, clear gender differences can be illuminated. Moral judgments of women differ from men's in the greater extent to which women's judgments are tied to feelings of empathy and compassion and are concerned more with resolution of "real-life" as opposed to hypothetical dilemmas (Skoe, 1994). The feminine voice emerges and proclaims worth based upon the ability to care for and protect others. The moral imperative for women is alleviate the real and recognizable trouble of the world without passing judgment (Gilligan, 1977). For men, the moral imperative is to respect the rights of others and noninterference in their pursuit of life and self-fulfillment (Gilligan, 1977). As such, gender role dictates of the culture may socialize women to define themselves in a context of human relationship and judge themselves in terms of their ability to care. The morality of rights differs from the morality of responsibility in its emphasis on separation rather than attachment and its consideration of the individual rather than the relationship.

Kohlberg's conception of morality is geared toward arriving at the just solution that could be agreed upon by all rational people (Gilligan, 1977; Gilligan, 1979). The responsibility and care ethic focuses on the limitations of any particular solution and describes the conflicts that remain. This often leads to very different perceptions of situations between male and female LEO and different opinions about the way that a call should be handled.

Women, by this reasoning, would find no comfort in any solution currently available to settle a domestic violence incident. One person must be taken to jail, which solves the immediate situation, but often leaves the victim isolated, penniless, and terrified. Male LEOs often feel the frustration of "solving the problem" by taking the alleged offender to jail and getting the legal process started, only to have the victim or legal system drop the charges.

With regard to defining their meaning and purpose in life Deborah Adler-Russell (1983) found that female LEO's occupational role was perceived to be one of social service police work and male LEO's occupational roles were more often described as law enforcement police work. Women engaged in more mediation, conflict resolution and referral making while males often assessed the situation and implemented the solution they saw fit. In addition, those women who entered law enforcement for social work reasons were more satisfied with their jobs (Colegrove, 1983).

Job satisfaction, role conflict and role ambiguity are all affected by gender.

Bonnie Semora (1994) and Elizabeth Bannerman (1996) found that men and women face the same broad-based stressors, but women additionally face stressors related to their minority status within the occupation. Women may face role ambiguity at work in relation to duties as well as in relation to expected behavioral norms physically, socially, emotionally, intellectually, spiritually and vocationally (Crose et al., 1992).

Within organizations, women are less likely to hold power positions and possess less authority in organizational decision-making, are rated as less influential than men and by other managerial and non-managerial personnel and they experience organizational politics as more stressful (di Salvo et al., 1988; Quick et al., 1992).

Gender differences in exposure to occupational stress and experience of adverse consequences were explored in a study of 358 male and 139 female police officers from one large provincial English police force. Female officers were less likely to be exposed to work-stressors involving the potential for violence, but if exposed, they report more severe adverse reactions than did their male counterparts. Women officers were also more likely to be involved with victims of violence or sexual offences and report higher levels of associated self-perceived stress than their male counterparts. There were relatively few differences in exposure to organizational stressors except that women detectives and uniformed officers report higher rates of sex discrimination and prejudice than did policemen (Brown and Fielding, 1993).

Politics which most greatly affected women are: people taking credit for others achievements, exchanging favors with people of higher rank, game playing to obtain power/authority and getting ahead by knowing the right person (Quick et al., 1992).

Summary

The profession of law enforcement has existed for hundreds of years.

Nevertheless, in the past 80 years there has been a dramatic rise in stress-related disabilities in LEOs (Bannerman, 1996; Cartwright et al., 1997). Many events have contributed to this upsurgence including: increases in the complexity of their duties and the parameters within which they operate; an increase in overall violence and crime in the

country; an increase in the diversity of the force; and an increase in awareness of the problems associated with stress.

Law enforcement is a very unique occupation with regard to the vast array of services and duties that LEOs are expected to be adept at performing. These duties almost always involve interaction with the public and exposure to potential danger. To date, all law enforcement officers are assumed to perceive and cope with all events similarly. Research in other fields has demonstrated that several variables affect people's perceptions of and reactions to stressors. These include: gender, gender-role and coping skills.

Women with traditional and non-traditional gender roles have been demonstrated not only to have different perceptions of stress, but also to use different coping styles in the line of duty. Since there is such a rigorous socialization process in law enforcement, the question arises as to whether there is an artificial change in gender-role that contributes more to the differential perception of events.

Further, it has been demonstrated that men and women often cope differently with many situations. Both genders seem to enact active coping styles. Many women are thought to actively modify their feelings about a situation and are then better able to solve while many men actively modify the situation and feel better as a result. This may be due to cultural and subcultural dictates that discourage men from displaying and acknowledging emotion, yet permit it for women. Men become adept at suppressing their internal states until they can solve the problem to make the "stress" go away. When women are indoctrinated into a rigidly masculine profession, the question arises as to whether this subculture: 1) adds stress by thwarting their natural tendencies, 2) attracts

women with a more masculine gender-role orientation, or 3) socializes women to adopt a more masculine gender-role.

Problems with Current Research

Research done in the area of law enforcement stress is slowly growing. It has only been within the past fifteen years that law enforcement agencies have let researchers behind the "blue wall" (Kurke and Scrivner, 1995). One of the first problems that arises is the difficulty with generalizability of findings. Demographic factors that affect application of results include the size of the department, it's geographic location and the type of agency (police department, sheriff's office).

Despite research demonstrating that female law enforcement officers differ greatly in their *gender-role* behaviors all but two studies have considered "*gender*" as the independent variable, and much of the research is qualitative, involving only 5-15 subjects from the same department. These studies are wonderful exploratory tools, but, again, limit generalizability.

In addition, the very nature of law enforcement exposes officers to stressors that are beyond the range of normal human experience. Therefore, when assessing the types of stressors encountered, special instruments need to be used. To date, most researchers have failed to use stress assessment instruments geared toward the special needs of emergency service personnel. In assessing the impact of such stressors, the validity and value of the woman's perspective must be accounted for. Scales that arbitrarily assign values for the relative stressfulness of events have been normed on male law enforcement officers.

The deleterious affects of stress on employees are well documented in the general workforce. Presently, there is little research on the effects of stress on American law enforcement officers. The research that has been done has failed to account for gender differences in an increasingly diverse workforce. Current rates of stress related illness among officers remains high indicating a need for more thorough study of the sources and effects of stress in order to provide better intervention.

CHAPTER 3 METHODOLOGY

The purpose of this study was to examine the contribution of gender, gender-role and coping styles on law enforcement officer's experience of stress. This chapter presents the population and sample for this study, relevant variables, instrumentation, hypotheses, data analysis procedures and methodological limitations.

Population and Sample

Fifteen law enforcement agencies in the southeastern United States were originally contacted. A letter was sent to the Police Chief or the Sheriff for each agency explaining the project and requesting participation. These letters were followed up a week later by a telephone call attempting to arrange an appointment to either call or meet with the sheriff or the police chief. Five agencies agreed to participate. Participation involved providing their employment roster, allowing questionnaires to be distributed and agreeing to distribute follow-up letters that would be sent to officers who did not return the questionnaire.

The population for this study consisted of only law enforcement patrol officers with suburban and urban police forces with a rank of sergeant or below. State Troopers and other law enforcement officers were not used because their duties are extremely different from the day-to-day work of police and sheriff's officers on patrol.

Sampling

The booklet for the study contained the instruments and the letter of consent requesting participation in the study (Appendix A, B, C, D, E, F). All pages of the booklet were marked with a booklet identification number. The booklet, in the pilot study, took between 20 and 30 minutes to complete.

The primary researcher distributed the packet during roll call at each agency.

Officers were asked to fill out the questionnaire and return it at the end of roll call. The participants were to sign the informed consent letter, and turn it in to the primary researcher separately from the rest of the completed packet.

Design and Analysis

The three dependent variables were the amount of overall "job" stress reported, the amount of occupational stress and the amount of organizational stress reported. The independent variables were gender, gender-role: restricted emotionality, inhibited affection, and success preoccupation age, duration in law enforcement, number of active coping skills used, number of passive coping skills used, and the number of defenses used.

The intensity and frequency of work-related and organizational stressors was measured using the scales of the Work Stress Inventory. The relative contribution of gender, gender-role, age, duration in law enforcement and coping style on each of the scales was analyzed through multiple regression analysis.

The Work Stress Inventory yielded three scores for each subscale, the frequency, the intensity and the composite. The two subscales were entitled job-risk and organizational stress. Further, an overall composite score for the entire instrument was also provided. For this instrument, participants were asked to rate the frequency and

intensity for each stressor listed. Composite scores were continuous variables operationally defined by the sum of the product of the reported frequency multiplied by the reported intensity for each stressor. The frequency of a stressor was measured on a four point likert scale ranging from "never" to "daily." The intensity of the stressors was measured, also on a four point likert scale ranging from "not stressful" to "extremely stressful."

Demographic data regarding gender, age, and duration in law enforcement were measured with a demographic questionnaire. Age was a continuous variable defined as age in years. Duration in law enforcement was continuously defined in years as well.

Coping styles and gender-role attitudes were assessed in order to determine why the intensity of the same stressor differs between officers. Coping styles, a continuous variable, was assessed using the COPE by (Carver et al., 1989). The subscales represent three major coping style categories: emotion-focused, problem-focused and passive defenses. Each subscale consists of a series of questions measured on a five-point likert-type scale which ranged from never to always. The subscale score was the sum of the responses. Gender-role attitude was assessed as a continuous variable using the Masculine Role Inventory, which has three subscales: success preoccupation, restrictive emotionality and inhibited affection (Snell, 1986). Higher scores on each subscale indicated a greater endorsement of masculine gender role behavior.

Null Hypotheses

- H1: Gender, gender-role, age, and coping style do not significantly add to the prediction of overall work stress.
- H2: Gender, gender-role, age, and coping style do not significantly add to the prediction of organizational work stress.
- H3: Gender, gender-role, age, and coping style do not significantly add to the prediction of job-risk work stress.

Instrumentation

The instruments in this study include a cover sheet assessing demographic information (Appendix C), the Masculine Role Inventory (Appendix E) (Snell, 1986), the COPE (Appendix B) (Carver, 1989), the Bern Sex-Role Inventory by Sandra Bern (Appendix A), and the Work Stress Inventory (Appendix D) (Barone, 1989). Each of these instruments are available for public use.

The Masculine Role Inventory

William Snell (1986) developed the Masculine Role Inventory (MRI) in order to measure three different aspects of traditionally masculine behavior. Success preoccupation was defined as the tendency for people to be obsessed with the development of a highly successful career and, as a result, experience constraints on their personal growth and involvement. Restrictive emotionality was conceptualized as people's tendency to restrict public expression of genuine emotions. Inhibited affection was considered the tendency to check and attempt to control feelings of love and affection. The questionnaire consists of 30 items in a four-point likert-type format ranging from 1 = strongly agree to 4 = strongly disagree. The MRI will be titled, "Role Inventory" in order to prevent biased responding.

This study used three groups of undergraduate students were asked to complete the Masculine Role Inventory (MRI) and the Jourard Self-Disclosure Questionnaire (JSDQ). The sample sizes were 225, 136, and 128 respectively. The results of the MRI and JSDQ were correlated, and a factor analysis was performed on the results of the Masculine Role Inventory. The results of the correlation demonstrated a strong relationship between "traditional male values" and restrictive emotionality and reservations about disclosing intimate and nonintimate information (Snell, 1986). The

factor analysis showed that two scales all had loadings above .5 on all items and over.4 on the success preoccupation scale. The internal consistency of the three subscales was conducted for each of the three groups yielding alphas of .84, .88 and .78 respectively for the restricted emotionality, .79, .79, .71 for the inhibited affection subscale and .80, .79, .71 for success preoccupation. Another study was used to establish concurrent validity. The Personality Attributes Questionnaire has previously been validated for use in identifying people with masculine or feminine roles. By comparing the results of the Masculine Role Inventory to personality traits as measured by the Personality Attributes Questionnaire for 294 female and 103 male undergraduates, concurrent validity was established (Snell, 1989).

Coping with Problems Experienced (COPE)

Carver, Scheier and Weintraub (1989) developed the COPE to assess how people cope with stress. The instrument contains three major scales: problem focused coping, emotion focused coping and defensive coping. Problem-focused coping is represented by active coping, planning, suppression of competing activities, restraint and seeking instrumental social support. Emotion-focused coping: seeking emotional social support, positive reinterpretation, and acceptance. Defensive reactions to stress were classified as venting emotions, turning to religion/suppression, behavioral disengagement, mental disengagement, and denial. The questions are administered in a 5 point-likert-type format. Three studies were initially conducted to demonstrate the reliability and validity of this instrument. In study one, the questionnaire was administered to 116 undergraduate students. The alpha reliabilities were then computed and were found to range from .62 to .92. Test-retest reliabilities were examined two separate times. One sample, consisting of 116 undergraduate students was given the questionnaire and

retested six weeks later. The second sample consisted of eighty-nine students and an eight-week interval between testing. Both samples yielded test-retest reliabilities from .54 to .86 on all subscales (Carver, 1989 #156).

A second study was conducted to assess the COPE's convergent and discriminant validity in relation to several personality factors: optimism, self-esteem, internality, hardiness, type-A, self-monitoring, state/trait anxiety and social desirability. The results indicated that problem-focused coping strategies were correlated with several conceptually related personality traits: optimism, self-esteem and internality. This lead researchers to conclude that "This converging pattern of associations suggests that the coping strategies postulated to be functional are in fact linked to personality qualities that are widely regarded as beneficial (p. 276)"(Carver, 1989).

A third study was conducted to investigate the applicability of the COPE across various situations. One hundred and seventeen undergraduate students completed the protocol for this investigation. The results produced from this study were similar to those from study 1.

A validation study using 484 ninth through twelfth graders replicated the high internal reliability initially found. Active coping, avoidant coping and emotion-focused coping were found to be related to gender (Jarvis, 1994). Other studies using the Spanish and Italian versions of the COPE, with 401 and 521 undergraduate students respectively, have also consistently demonstrated similar levels of reliability and factor validity (Sica et al., 1997)

The Work Stress Inventory

David Barone (1982) developed the Work Stress Inventory (WRI) in order to measure the frequency and intensity of organizational stressors and stressors related to job risk in emergency service personnel. Questions are presented in a four-point likerttype format with each question having two required responses: the rating of the frequency ranging from 1 = never to 4 = very frequently and the rating of the intensity ranging from 1 = not stressful to 4 = extremely stressful. Scales demonstrated alpha reliabilities of .93 and test- retest reliabilities ranging from .84 to .91

Four studies were conducted to validate this instrument using over 800 workers. In study one, the Work Stress Inventory was administered to three hundred participants. A Principal Components Factor Analysis was then performed and demonstrated "an internally consistent unifactor scale of work stress (Barone, 1988)" with a coefficient alpha of .97. Study two used 100 participants and attempted to validate the scale using measures of job satisfaction the Job Descriptive Index; self-reported anxiety, the State Trait Anxiety Inventory and daily stressors, the Hassles Scale. As scores on the WSI increased, measures of job satisfaction decreased and measures of anxiety and daily stressors increased. The all scales of the WSI strongly correlated with the three measures, but especially strongly with the measure of job satisfaction. Thus indicating that the WSI can predict the aspects of work stress it purports to measure: overall stress levels, frequency of stressors and the perceived stressfulness or intensity of the stressor. The results indicated support for the reliability and validity of the frequency subscales (Barone et al., 1988).

Study 3 used 231 people to assess the job-risk subscale. The Principal

Components Factor Analysis yeilded alpha coefficients of .91 and correlations of at least

.56. In study four 182 participants were administered the Work Stress Inventory, The

Organizational Commitment Questionnaire, the work and supervision scales of the Job

Description Index and the Trait Anxiety scale of the State Trait Anxiety Inventory. Four

weeks later, only the WSI was re-administered. The test-retest reliabilities for intensity, frequency and composite subscales were.88, .83 and.84 respectively for the organizational stress scale and .90, .91 and .90 on the job risk scale. Again, the positive correlations between stress and anxiety and satisfaction and commitment were found. The results supported the reliability and construct validity of the instrument.

The Bem Sex Role Inventory (BSRI)

Sandra Bem developed the Bem Sex Role Inventory in 1974 in order to measure people's masculine and feminine characteristics. This instrument is based upon the idea that masculinity and femininity are two independent dimensions instead of opposite ends of a spectrum. The BSRI has four subscales, masculinity, femininity, androgyny and social desirability. The questionnaire consists of 60 items in a seven-point likert-type format ranging from 1 = Never true to 7 = always true. The BSRI will be titled, "Role Inventory" in order to prevent biased responding.

The BSRI was administered to 444 male and 279 female undergraduate students at Stanford University and 117 male and 77 female students at Foothill Junior College. Internal consistency was computed for all three subscales for both samples. The alpha reliabilities were .86, .80 and .75 for masculinity, femininity and social desirability for the Stanford sample and .86, .82 and .70 for the sample from Foothill Junior College. The coefficient alpha was computed for the androgyny difference score and was .85 for the Stanford sample and .86 for the Foothill sample. Regarding test-re-test reliability, the instrument was re-administered to twenty-eight males and twenty-eight females from the Stanford sample. The correlations between the first and second testing were .90, .90, .93 and .89 for masculinity, femininity, androgyny and social desirability respectively.

Research Procedures

The instruments and a self-report questionnaire were combined into a packet. An informed consent letter and a statement of permission by their commanding officer to participate in the study was also given to them to sign (Appendix F). The informed consent was turned in to the primary researcher and the officer was given a packet to fill out. The officers were given envelopes in which to return their questionnaires to the primary researcher immediately following roll call. The informed consent document was kept in a locked filing drawer and destroyed after the analyses were performed.

Data Analyses

There were a total of twelve variables in this study. The independent variables were: gender, gender-role dimensions of inhibited affection, restricted emotionality and success preoccupation, age, duration in law enforcement and coping style as measured by three types of coping, problem focused, emotion focused and defensive coping styles. The dependent variables were the levels of: composite stress, organizational stress and job-risk stress.

The descriptive statistics were compiled for the sample by calculating means and standard deviations for all continuous variables. The final step was to test each of the proposed hypotheses. This was done through the use of three multiple regression analyses to assess the relative contribution of each variable to job-risk stress, organizational stress and overall work stress.

CHAPTER 4

The purpose of this study was to examine the relationship of gender, gender-role and coping styles for males and females in a traditionally masculine profession, law enforcement. This study specifically examined the relationship between gender role, gender, occupational stress, job stress and coping style on overall stress.

Sample Demography

The sample for this study consisted of male and female law enforcement officers from six departments throughout the state of Florida including: two midsize sheriffs offices; two midsize police departments; and two university police departments. The primary investigator attended all roll calls for every department to administer the survey to all officers/deputies. Participation was voluntary at all departments. Complete surveys were returned by 360 participants. Twenty-three additional surveys were incomplete and thirty-one people refused to fill out the survey or sign an informed consent, resulting in an 87% participation rate.

The respondent sample consisted of 69 females ranging in age from 23 to 54 years with a mean age of 33.83 years (standard deviation = 7.58 years) and 291 males with ages ranging from 21 to 70 years and a mean age of 37.27 years (standard deviation = 9.72 years). The difference in ages was statistically significant at the .05 level (p = 0.007).

The racial ethnic composition of the participants was 0.3% Asian American, 7.5% African American, 3.6% Hispanic American and 86.1% Caucasian American. Due to the limited variability of the racial composition of the sample, the dimension of race was removed as a variable of interest in this study.

The marital status composition 62.2% were married or in a long-term relationship, 20.8% were single and 13.9% were currently divorced.

The educational composition of the sample was 30.6% with a high school diploma, 33.9% with an associates degree, 30.6% with a bachelors degree, and 3.1% with higher than a bachelors degree.

Descriptive Statistics

Several instruments were used in this study: the Masculine Role Inventory (Snell, 1986), the COPE (Carver, 1989), the Bem Sex-Role Inventory by Sandra Bem (Bem, 1979) and the Work Stress Inventory (Barone, 1988). Additionally, a brief questionnaire was used to assess demographic variables and physical (ulcers, high blood pressure) and psychological symptoms of stress (irritability, restlessness, hopelessness).

In addition to the demographic variables of age, race, education and marital status officers self-report of mental and physical health complaints, specifically related to symptoms that have been strongly correlated to high-stress levels. To evaluate mental health complaints, the officers were given a list of the symptoms for Post Traumatic Stress Disorder, generalized anxiety disorder and depression, and were asked to check the symptoms that applied to them. They were asked to check the symptoms that they have experienced for more days than not over the last six months.

In table 1, the mental health symptoms are listed. Eleven percent of officers reported no mental health symptoms at all, 28% reported having between one and two complaints and 32% had between three and five symptoms.

Table 1 Mental Health Symptoms

Item	Percentage of Officers Reporting
Depression	32
Loss of pleasure in most activities	13
Irritability	68
Significant changes in weight (not due to dieting or pregnancy)	11
Sleep difficulties	57
Restlessness	28
Fatigue	66
Feelings of worthlessness	10
Poor concentration	21
Indecisiveness	10
Recurrent suicidal thoughts	0
Feelings of helplessness and/or hopelessness	2
Sense of numbing/detachment / An "I don't care" attitude	30
Inability to recall important aspects of an event	0
Stressful events are repeatedly re-experienced through flashbacks,	8
images, thoughts or dreams	
Anxiety	21
Muscle Tension	34
Significant changes in sex drive	10
Increased use of alcohol or other sedatives	0

In the study 23.4% of officers said that, if an anonymous stress debriefing hotline was available, they would use it. This is in contrast to the 7.8% of officers who have used the employee assistance program.

Officers were also given a checklist of physical symptoms and asked to indicate any that they were experiencing. Thirty seven percent of officers reported at least one stress-related physical symptom. The mean number of symptoms reported was less than one for males and females. The following table illustrates the percentage of officers reporting each symptom.

Table 2 Physical Health Symptoms

<u>Item</u>	Percentage of Officers Reporting
Blood pressure	2
Diabetes	2
Cholesterol	7
Obesity	17
Smoking	23
Back pain	11
Ulcers	6
Indigestion	28
Heart disease	<1

The next instrument was the Bem Sex Role Inventory. An ANOVA was run. Of the three subscales, femininity, masculinity and androgyny, the only subscale that showed significant between group gender differences at the 0.05 level or below was the subscale for masculinity (p = 0.046), with men scoring higher than women.

Table 3 Bem Sex Role Inventory ANOVA

		z	Mean	Std. Deviation	Minimum	Maximum
Feminine	Male	291	4.8983	.6364	2.30	6.70
Mean	Female	69	4.9667	.6692	3.30	6.30
	Total	360	4.9114	.6425	2.30	6.70
Masculine	Male	291	5.3612	.5706	3.90	6.90
Mean	Female	69	5.2058	.6202	3.70	6.70
	Total	360	5.3314	.5827	3.70	6.90
Androgynous	Male	291	4.9907	.4477	3.50	6.20
Mean	Female	69	4.9667	.5052	3.30	6.30
	Total	360	4.9861	.4586	3.30	6.30

The Masculine Role inventory evaluated three specific aspects of masculinity: restricted emotionality, success preoccupation and inhibited affection demonstrated.

Lower scores represented a weaker endorsement of each characteristic. No significant

between group differences were found. Table four represents the descriptive statistics for the Masculine Role Inventory.

Table 4 Masculine Role Inventory ANOVA

		N	Mean	Std. Deviation	Minimum	Maximum
Restricted	Male	291	15.5464	3.8220	8.00	31.00
Emotion	Female	69	15.0725	3.9457	8.00	24.00
	Total	360	15.4556	3.8449	8.00	31.00
Inhibited	Male	291	6.7079	2.2083	3.00	12.00
Affection	Female	69	6.3188	1.8747	3.00	10.00
	Total	360	6.6333	2.1514	3.00	12.00
Success	Male	291	6.6426	2.3110	3.00	16.00
Preoccupation	Female	69	6.7681	1.8641	4.00	11.00
	Total	360	6.6667	2.2305	3.00	16.00

The COPE evaluated coping styles along three dimensions: instrumental coping, emotion-focused coping and defensive reactions. No differences were found. Table five shows the descriptive statistics for the Coping with Problems Experienced (COPE).

Table 5 Coping With Problems Experienced ANOVA

		N	Mean	Std. Deviation	Minimum	Maximum
Instrumental	Male	291	20.3127	5.2845	7.00	34.00
	Female	69	21.1014	5.1881	9.00	31.00
	Total	360	20.4639	5.2682	7.00	34.00
Emotion	Male	291	22.4674	5.4622	9.00	37.00
	Female	69	22.3913	4.8665	10.00	33.00
	Total	360	22.4528	5.3468	9.00	37.00
Defensive	Male	291	15.7045	3.7585	2.00	31.00
	Female	69	16.5507	4.2583	10.00	29.00
	Total	360	15.8667	3.8674	2.00	31.00

The Work Stress Inventory is an instrument that was specifically designed to address work stress in emergency service occupations. The job-risk intensity subscale demonstrated that there are significant between group differences at the 0.05 level or

below (p = 0.009). Table six illustrates the descriptive statistics for the Work Stress Inventory.

Table 6 Descriptive Statistics for the Work Stress Inventory

				Std.		
		N	Mean	Deviation	Minimum	Maximum
Occupational	Male	291	26.5326	11.6930	2.00	54.00
Frequency	Female	69	25.7391	12.8940	2.00	51.00
	Total	360	26.3806	11.9179	2.00	54.00
Occupational	Male	291	26.6426	12.0912	1.00	55.00
Intensity	Female	69	27.4058	12.6982	1.00	52.00
	Total	360	26.7889	12.1955	1.00	55.00
Job Risk	Male	291	26.5739	12.4398	2.00	56.00
Stress	Female	69	27.4058	10.4857	7.00	54.00
Frequency	Total	360	26.7333	12.0806	2.00	56.00
Job Risk	Male	291	22.5704	11.5067	.00	63.00
Stress	Female	69	26.5942	11.4588	6.00	55.00
Intensity	Total	360	23.3417	11.5906	.00	63.00
Occupational	Male	291	810.0687	611.8787	2.00	2915.00
Composite	Female	69	817.0000	661.7044	9.00	2652.00
	Total	360	811.3972	620.7897	2.00	2915.00
Job Risk Stres	Male	291	669.4811	539.6947	.00	2597.00
Composite	Female	69	808.7971	598.1938	48.00	2970.00
	Total	360	696.1833	553.2476	.00	2970.00
Composite	Male	291	1479.5601	1018.0042	14.00	4466.00
Stress	Female	69	1625.7971	1183.5208	69.00	5274.00
	Total	360	1507.5889	1051.5650	14.00	5274.00

Results of Hypotheses Tests

In an attempt to identify a set of variables that could reliably predict high levels of stress among officers, and identify any differences in the types of stressors among subgroups, the relationship of: gender, education, marital status, gender role attitude, jobrisk stress, organizational stress and coping style to stress was examined.

Hypothesis One

H1: Gender, gender-role, age, coping style, the frequency and intensity of job-risk and organizational stressors do not significantly add to the prediction of overall work stress.

A multiple regression analysis was conducted to test this hypothesis. The independent variables were the variables of the three subscales of the Bem Sex Role Inventory (masculinity, femininity, androgyny); the three subscales of the Masculine Role Inventory (restricted emotionality, inhibited affection and success preoccupation), gender, age, the three subscales of the COPE (defensive, emotion-focused and problem-focused), and the four subscales of the Work Stress Inventory: Job Risk Stress Frequency, Job Risk Stress Intensity, Organizational Stress Frequency, Organizational Stress Intensity and the dependent variable was overall work stress. Using a simultaneous multiple regression, a significant model predicting overall work stress emerged (F_{18,327}= 271.848, p<0.0005. Adjusted R square = 0.934).

In 1974, Sandra Bem developed the Bem Sex Role Inventory in order to measure people's masculine and feminine characteristics. In this study, several interesting results emerged. First, there was not a statistically significant difference between the amount of feminine or neutral/androgynous characteristics endorsed by male or female law enforcement officers. Secondly, there was a significant difference between the number and intensity of masculine characteristics endorsed by male and female officers (p=0.046) with males more strongly endorsing more masculine characteristics.

Carver, Scheier and Weintraub (1989) developed the COPE to assess how people cope with stress. There are no statistically significant differences between males and females on the three coping dimensions: instrumental/problem-focused p= 0.264; emotion focused coping p= 0.916 and defensive coping p= 0.102.

The final instrument was the Work Stress Inventory (WSI) developed by David Barone in 1982 in order to measure the frequency and intensity of organizational stressors and stressors related to job risk in emergency service personnel. The two groups did not differ significantly on any of the subscales: organizational intensity, organizational frequency, job-risk frequency, organizational composite or (overall) composite stress. However, there was a statistically significant difference (p= 0.009) between the two groups on the dimension of job-risk stress intensity with female officers perception of job-risk stress being much higher then males reported perception.

The results of the multiple regression for the entire sample with overall work stress as the dependent variable are presented in Table 7.

Table 7 Composite Work Stress Multiple Regression Output for Entire Sample

	Standardized Coefficients			Collinearity	Statistics
	Beta	t	Sig.	Tolerance	VIF
(Constant)		-5.800	.000		
Age	005	301	.763	.791	1.264
Education	.008	.555	.579	.955	1.047
Marital Status	7.700	.364	.716	.861	1.161
Feminine Mean	005	260	.795	.447	2.235
Masculine Mean	.011	.696	.487	.754	1.326
Androgynous Mean	.022	1.058	.291	.435	2.298
Instrumental	016	894	.372	.635	1.575
Emotion	030	-1.592	.112	.549	1.822
Defensive	.021	1.215	.225	.652	1.533
Restricted Emotionality	007	362	.718	.574	1.741
Inhibited Affection	.002	.132	.895	.656	1.524
Success Preoccupation	.001	.041	.967	.550	1.819
Organizational Stress Frequency	.332	14.382	.000	.360	2.774
Organizational Stress Intensity	.284	11.359	.000	.306	3.264
Job Risk Stress Frequency	.194	9.554	.000	.466	2.145
Job Risk Stress Intensity	.378	17.747	.000	.422	2.370

The frequency of organizational stress and the intensity of job-risk stress most significantly contributed to the prediction of overall work stress for both genders.

In order to assess whether there were differences between the genders for the prediction of overall work stress, a multiple regression was run for females (Table 8) and again for males (Table 9),

For the sample of female participants, a significant model emerged ($F_{18.50}$ = 296.38 p<0.0005. Adjusted R square = 0.937):

Table 8 Composite Work Stress Multiple Regression Output for Female Sample

	Standardized Coefficients			Collinearity	Statistics
	Beta	t	Sia.	Tolerance	VIF
(Constant)		-3.106	.003		
Feminine Mean	003	045	.964	.238	4.202
Masculine Mean	.065	1.478	.146	.474	2.109
Androgynous Mean	006	095	.925	.245	4.085
Instrumental	.026	.565	.574	.440	2.271
Emotion	068	-1.441	.156	.420	2.380
Defensive	.079	1.537	.131	.349	2.862
Restricted Emotion	011	222	.826	.410	2.441
Inhibited Affection	025	542	.590	.427	2.340
Success Preoccupation	.018	.419	.677	.525	1.905
Age	004	095	.925	.607	1.647
Education	062	-1.820	.075	.805	1.242
Rank	.028	.673	.504	.544	1.84C
Organizational Frequency	.313	5.713	.000	.308	3.250
Organizational Intensity	.250	4.230	.000	.264	3.783
Job Risk Stress Frequency	.219	4.157	.000	.331	3.019
Job Risk Stress Intensity	.332	5.838	.000	.285	3.503

It appears that females who endorse a defensive coping style and have less formal education may tend to have higher overall stress, but these variables' contribution to the overall model was not statistically significant. Of the four subscales of the Work Stress Inventory, the perceived stressfulness of characteristics inherent to this occupation and the frequency of organizational stressors contribute most to the model.

For the sample of male participants, a significant model also emerged ($F_{17,266}$ = 263.6315 p<0.0005. Adjusted R square = 0.933). Table nine shows the results of the regression analysis for the male participants.

Table 9 Composite Work Stress Multiple Regression Output for Male Sample

	Standardized Coefficients			Collinearity	/ Statistics
	Beta	t	Sig.	Tolerance	VIF
(Constant)		-4.530	.000		
symptom total	.014	.742	.459	.716	1.396
Mental Health Symptom Total	010	573	.567	.709	1.410
Feminine Mean	011	473	.636	.464	2.153
Masculine Mean	008	426	.671	.757	1.321
Androgynous Mean	.028	1.201	.231	.429	2.330
Instrumental	020	-1.079	.282	.661	1.512
Emotion	029	-1.370	.172	.538	1.853
Defensive	.005	.250	.803	.659	1.518
Restricted Emotion	004	214	.831	.580	1.725
Inhibited Affection	.002	.119	.906	.659	1.518
Success Preoccupation	001	058	.954	.560	1.785
Age	010	584	.560	.758	1.319
Education	.021	1.331	.184	.926	1.079
Organizational Stress Frequency	.325	12.434	.000	.346	2.886
Organizational Stress Intensity	.302	10.632	.000	.295	3.393
Job Risk Stress Frequency	.201	9.015	.000	.479	2.089
Job Risk Stress Intensity	.376	16.251	.000	.443	2.257

For the male sample, coping style and educational level did not have even a modest relationship to the prediction of overall work stress; however, the same pattern emerged with the subscales of the work stress inventory with the frequency of organizational stressors and the perceived stressfulness of job-risk stressors most significantly contributing to the prediction of overall work stress

Hypothesis Two

H2: Gender, gender-role, age, coping style and the frequency and intensity of job-risk and organizational stressors do not significantly add to the prediction of organizational work stress.

A multiple regression analysis was, again, conducted on the entire sample and both male and female samples independently to test this hypothesis. The independent variables were the variables of the three subscales of the Bem Sex Role Inventory (masculinity, femininity, androgyny); the three subscales of the Masculine Role Inventory (restricted emotionality, inhibited affection and success preoccupation), gender, age, the four subscales of the Work Stress Inventory (job risk stress frequency, Job Risk Stress Intensity, Organizational Stress Frequency and Organizational Stress Intensity) and the three subscales of the COPE (defensive, emotion-focused and problem-focused) and the dependent variable was organizational work stress.

For the entire sample, a significant model emerged ($F_{18,334} = 177.834 \ p < 0.0005$. Adjusted R square = 0.90). The results of the multiple regression for the entire sample with organizational work stress as the dependent variable are presented in Table 10.

Table 10 Multiple Regression for the Entire Sample for Organizational Work Stress

	Standardized Coefficients		
	Beta	t	Sig.
(Constant)		-3.68	.000
Gender	.000	015	.988
symptom total	.014	.704	.482
Mental Health Symptom Total	011	550	.583
Feminine Mean	.003	.101	.920
Masculine Mean	.005	.257	.798
Androgynous Mean	.009	.350	.727
Instrumental	003	153	.879
Emotion	020	867	.387
Defensive	012	570	.569
Restricted Emotion	.002	.108	.914
Inhibited Affection	026	-1.25	.214
Success Preoccupation	.010	.434	.665
Age	.005	.254	.800
Education	002	103	.918
Organizational Stress Frequency	.533	19.0	.000
Organizational Stress Intensity	.492	16.3	.000
Job Risk Stress Frequency	048	-1.97	.050
Job Risk Stress Intensity	.076	2.969	.003

For the prediction of organizational work stress, again, the frequency of the organizational stressors contributed more to the prediction of overall organizational stress than the intensity. Interestingly, job-risk stress frequency and intensity are still statistically significant contributors to the prediction of organizational stress.

Table 11 reports the results from the multiple regression analysis for only the females in the sample. A significant model emerged ($F_{18,50}$ = 164,8486 p<0.0005. Adjusted R square = 0.938).

Table 11 Multiple Regression for the Female Sample for Organizational Work Stress

	Standardized				
	Coefficients			Collinearity S	
	Beta	t	Sig.	Tolerance	VIF
(Constant)		-2.993	.004		
symptom total	.024	.614	.542	.579	1.727
Mental Health Symptom Total	.005	.115	.909	.496	2.016
Feminine Mean	.036	.588	.559	.238	4.202
Masculine Mean	.113	2.582	.013	.474	2.10
Androgynous Mean	056	924	.360	.245	4.08
Instrumental	.028	.605	.548	.440	2.27
Emotion	052	-1.109	.273	.420	2.38
Defensive	.027	.524	.603	.349	2.86
Restricted Emotion	.035	.737	.465	.410	2.44
Inhibited Affection	064	-1.394	.170	.427	2.34
Success Preoccupation	.012	.283	.778	.525	1.90
Age	012	318	.752	.607	1.64
Education	084	-2.502	.016	.805	1.24
Rank	.060	1.459	.151	.544	1.84
Organizational Stress Frequency	.540	9.922	.000	.308	3.25
Organizational Stress Intensity	.427	7.262	.000	.264	3.78
Job Risk Stress Frequency	.038	.721	.474	.331	3.01
Job Risk Stress Intensity	.055	.966	.339	.285	3.50

In an effort to identify which people will report more distress due to organizational stressors, it appears that, again, education demonstrates a negative relationship (p= 0.016) and the frequency of the organizational stressors impacts the prediction more than the perceived intensity. For female participants, a stronger

endorsement of masculine characteristics was also related to an increase in organizational stress (p=.013).

For the sample of male participants, a significant model emerged ($F_{17,266}$ = 201.04 p<0.0005. Adjusted R square = 0.891). Table 12 presents the results from this analysis.

Table 12 Multiple Regression for the Male Sample for Organizational Work Stress

	Standardized Coefficients			Collinearity	Statistics
	Beta	l t	Sig.	Tolerance	VIF
(Constant)		-4.530	.000		
Feminine Mean	011	473	.636	.464	2.153
Masculine Mean	008	426	.671	.757	1.321
Androgynous Mean	.028	1.201	.231	.429	2.330
Instrumental	020	-1.079	.282	.661	1.512
Emotion	029	-1.370	.172	.538	1.858
Defensive	.005	.250	.803	.659	1.518
RestrictEmotion	004	214	.831	.580	1.725
Inhibited Affection	.002	.119	.906	.659	1.518
Success Preoccupation	001	058	.954	.560	1.785
Age	010	584	.560	.758	1.319
Education	.021	1.331	.184	.926	1.079
Organizational Stress Frequency	.325	12.434	.000	.346	2.886
Organizational Intensity	.302	10.632	.000	.295	3.393
Job Risk Stress Frequency	.201	9.015	.000	.479	2.089
Job Risk Stress Intensity	.376	16.251	.000	.443	2.257

For males in this sample, not only did organizational stress frequency and intensity predict organizational stress, but job-risk stress also added to the prediction of organizational stress.

Hypothesis Three

H3: Gender, gender-role, age, coping style and the frequency and intensity of job-risk and organizational stressors do not significantly add to the prediction of job-risk stress.

A multiple regression analysis was conducted on both the male and female sample to test this hypothesis. The independent variables were the variables of the three subscales of the Bem Sex Role Inventory (masculinity, femininity, androgyny); the three subscales of the Masculine Role Inventory (restricted emotionality, inhibited affection and success preoccupation), gender, age, the four subscales of the Work Stress Inventory (job risk stress frequency, job risk stress intensity, organizational stress frequency and organizational stress intensity) and the three subscales of the COPE (defensive, emotion-focused and problem-focused) and the dependent variable was Job-Risk work stress.

A multiple regression to predict job-risk stress was run using the entire sample. A significant model emerged ($F_{18,334}$ = 179.117 p=<0.0005. Adjusted R square = 0.901), and the results of that analysis are presented in Table 13.

Table 13 Multiple Regression for Job Risk Stress for the Entire Sample

	Standardized Coefficients		
	Beta	t	Sig.
(Constant)		-4.269	.000
Gender	.001	.061	.952
symptom total	.014	.717	.474
Mental Health Symptom Total	024	-1.191	.234
Feminine Mean	020	798	.425
Masculine Mean	.007	.337	.736
Androgynous Mean	.027	1.068	.286
Instrumental	020	938	.349
Emotion	044	-1.948	.052
Defensive	.053	2.548	.011
Restricted Emotion	016	709	.479
Inhibited Affection	.027	1.300	.195
Success Preoccupation	005	229	.819
Age	017	873	.384
Education	.014	.824	.411
Organizational Stress Frequency	.027	.967	.334
Organizational Stress Intensity	.002	.063	.950
Job Risk Stress Frequency	.426	17.409	.000
Job Risk Stress Intensity	.630	24.554	.000

The results indicate that defensive coping (p=0.011), job-risk stress frequency (p<0.0005) and job-risk intensity (p<0.0005) most significantly predict job risk stress. Emotion focused coping approached significance at the 0.05 level (p=0.052).

The analysis was again run using only the female participants. A significant model emerged ($F_{18,50}$ = 154.71 p=<0.0005. Adjusted R square = 0.933). The results are presented in Table 14.

Table 14 Multiple Regression for Job Risk Stress for the Female Sample

	Standardized Coefficients			Collinearity Statistics	
	Beta	t i	Sig.	Tolerance	VIF
(Constant)		-2.762	.008		
symptom total	.016	.380	.705	.579	1.73
Mental Health Symptom Total	038	860	.394	.496	2.02
Feminine Mean	046	712	.480	.238	4.20
Masculine Mean	.004	.079	.937	.474	2.11
Androgynous Mean	.051	.802	.426	.245	4.08
Instrumental	.021	.438	.663	.440	2.27
Emotion	076	-1.579	.121	.420	2.38
Defensive	.127	2.386	.021	.349	2.86
Restricted Emotion	059	-1.210	.232	.410	2.44.
Inhibited Affection	.021	.447	.657	.427	2.34
Success Preoccupation	.022	.501	.619	.525	1.91
Age	.006	.157	.876	.607	1.65
Education	029	820	.416	.805	1.24
Rank	011	266	.791	.544	1.84
Organizational Stress Frequency	.021	.372	.711	.308	3.25
Organizational Stress Intensity	.022	.366	.716	.264	3.78
Job Risk Stress Frequency	.392	7.195	.000	.331	3.02
Job Risk Stress Intensity	.596	10.153	.000	.285	3.50

Female participants who endorse defensive coping strategies tend to have higher scores on job-risk stress. Additionally, the perceived intensity of job-risk stressors impact the model more significantly than the perceived frequency of those stressors, although both are statistically significant (p< 0.0005).

The results of the regression analysis for the sample of male participants are presented in Table 15. A significant model emerged ($F_{17,266}$ = 177.7981 p=<0.0005. Adjusted R square = 0.892).

Table 15 Multiple Regression for Job Risk Stress for the Male Sample

	Standardized Coefficients			Collinearity Statistics	
	Beta	l t	Sig.	Tolerance	VIF
(Constant)		-3.280	.001		
Feminine Mean	014	486	.627	.464	2.153
Masculine Mean	.010	.437	.662	.757	1.321
Androgynous Mean	.015	.493	.623	.429	2.330
Instrumental	029	-1.185	.237	.661	1.512
Emotion	037	-1.402	.162	.538	1.858
Defensive	.034	1.400	.163	.659	1.518
Restricted Emotion	003	128	.898	.580	1.725
Inhibited Affection	.036	1.496	.136	.659	1.518
Success Preoccupation	018	681	.496	.560	1.785
Age	025	-1.126	.261	.758	1.319
Education	.028	1.358	.176	.926	1.079
Organizational Stress Frequency	.021	.625	.532	.346	2.886
Organizational Stress Intensity	.002	.046	.963	.295	3.393
Job Risk Stress Frequency	.441	15.598	.000	.479	2.089
Job Risk Stress Intensity	.625	21.245	.000	.443	2.257

For the male officers in this sample, coping style did not significantly impact their level of job-risk stress. Only job-risk stress frequency and intensity had any significant impact on the model.

Summary

The aim of this study was to discern the relationship between different types of work stressors and demographic variables, gender role, gender, organizational stress, job risk stress and coping style in male and female law enforcement officers. The first hypothesis examined the relationship between these variables and overall work stress. The results of a multiple regression analysis revealed that the frequency of organizational

stressors and the perceived dangerousness of the job (job-risk stress intensity) most contributed to the ability to predict overall work stress. Overall stress levels for both genders was similar, but there was a significant difference between genders for job-risk stress intensity (the stress caused by the perceived dangerousness of the job) with females having higher scores.

When the analysis was broken down to assess if there were any differences between the genders, it appears that females who endorse a defensive coping style and have less formal education tend to have higher overall work stress levels. For the male sample, coping style and educational level did not have even a modest relationship to the prediction of overall work stress; however, the frequency of organizational stressors and the perceived stressfulness of job-risk stressors most significantly contributed to the prediction of overall work stress.

The second hypothesis examined the relationship among the same variables and organizational work stress (stressors such as politics, interpersonal conflicts etceteras). It appears that, again, education demonstrates a negative relationship and the frequency of the organizational stressors impacts the prediction more than the perceived intensity. For female participants, a stronger endorsement of masculine characteristics was also related to an increase in organizational stress. For male participants, not only did organizational stress frequency and intensity predict organizational stress, but job-risk stress also somewhat added to the prediction of organizational stress.

The third hypothesis once again examined the same variables and their relationship to job-risk work stress. Female participants who endorse defensive and/or emotion-focused coping strategies tend to have higher scores on job-risk stress.

Additionally, the perceived intensity of job-risk stressors impacts the model more

significantly than the perceived frequency of those stressors, although both are statistically significant. For the male officers in this sample, coping style did not significantly impact their level of job-risk stress. Only job-risk stress frequency and intensity had any significant impact on the model.

Discussion of the limitations, conclusions, implications and recommendations related to these results are presented in Chapter 5.

CHAPTER 5 DISCUSSION

Discussion of Descriptive Statistics

The purpose of this study was to examine the contribution of gender, gender-role and coping styles for males and females in a traditionally masculine profession, law enforcement. Several new and previously little-researched areas were explored. Overall job stress among American law enforcement officers has only modestly been explored. Thus, the current study includes descriptive information as well as inferences about the relationships among these variables. Interpretation and implications of the findings are presented. Additionally, limitations encountered in this study and recommendations for future research are discussed.

The sample consisted of male and female law enforcement officers from six departments throughout the state of Florida including: two midsize sheriffs offices; two midsize police departments; and two university police departments. This provided a fair amount of generalizability of the findings to other departments within Florida.

Participants completed the Masculine Role Inventory (Snell, 1986), the COPE (Carver, 1989), the Bem Sex-Role Inventory (Bem, 1974) and the Work Stress Inventory (Barone, 1989), and a brief demographic questionnaire. A non-experimental, correlational design was used to test the research hypothesis, because the variables were not experimentally manipulated. All of the hypotheses were stated in the null form and were tested at the 0.05 level of significance.

The respondent sample consisted of 69 females ages ranging from 23 to 54 years with a mean age of 33.83 years (standard deviation = 7.58 years) and 291 males with ages ranging from 21 to 70 years and a mean age of 37.27 years (standard deviation = 9.72 years). The difference in ages was statistically significant. Much of this age gap can be attributed to the relatively recent influx of women into the profession of law enforcement. The starting age for officers will likely increase to around 22 as more departments begin require a bachelors' degree.

The proportion of males and females in this sample was also somewhat skewed. The average proportion of males to females in law enforcement in the state of Florida is 9%. Women in this study made up 19.2% of the sample. Patrol is considered the least desirable, prestigious area to work in as well as being the entry point for all officers. The fact that state statistics indicate around a 9% overall percentage of women in the police force and our sample was composed of almost 20% may indicate either that women are being hired into the police force, there is something of a glass ceiling that keeps them in patrol, or more women have been hired in the past year than in previous years (Quick, 199).

In the sample 62.2% were married or in a long-term relationship, 20.8% were single and 13.9% were currently divorced. There was a significant between group gender difference. More women in this sample were currently divorced. The fact that women were younger than the men and more women were currently divorced may indicate that 1) they got divorced and needed a career that they could train for in six-months, 2) they identified themselves as divorced whereas the men identified themselves as "single" and/or 3) once divorced, it is harder for female officers to find significant others as women in law enforcement are often perceived as dominating. Much research has

indicated that the divorce rate in law enforcement is higher than in the general population and that law enforcement officers often marry multiple times (Ansen and Colon, 1995). This was not found among the current participants, but may be due to 1) not asking if they were *ever* divorced or how many times they were married, 2) not asking how long their long term relationship has lasted or 3) may be a statistic that needs to be re-evaluated in terms of present-day reliability.

The educational composition of the sample was 30.6% with a high school diploma, 33.9% with an associate's degree, 30.6 % with a bachelor's degree, and 3.1 % with higher than a bachelor's degree. The recent trend in law enforcement hiring is to require an associate's degree for promotion to sergeant and a bachelor's degree for promotion to lieutenant. Some of the larger agencies require a bachelor's degree simply to be hired. The negative relationship between organizational work stress and increases in education seems to indicate that a college education either provides necessary tools to help people deal with organizational stressors such as rivalries, internal politics and conflict or provides sufficient similar experiences that people are desensitized.

The other two areas of interest were the officers self-report of mental and physical health complaints, specifically targeted at symptoms that have been strongly correlated to high-stress levels. To evaluate mental health complaints, the officers were given a list of the symptoms for Post Traumatic Stress Disorder, generalized anxiety disorder and depression. Eleven percent of officers reported no mental health symptoms at all.

Twenty eight percent reported having between one and two complaints and 32% had between three and five symptoms. What is most startling is that 68% of officers report frequently being irritable for the past six months. Sixty six percent of officers report being fatigued and 57% report sleep difficulties. Depressions, restlessness, a sense of

numbing/detachment and muscle tension were also reported by approximately a third of officers. Many reports have commented on the poor health and wellness behaviors and relative lack of attention to comprehensive wellness within law enforcement organizations.

In a study by Carlier, Lamberts and Gersons (1997) 262 traumatized police officers were surveyed and results showed that 7% of the entire sample had PTSD and 34% had subthreshold PTSD. At three-months post-trauma, symptoms were further predicted by introversion, difficulty in expressing feelings, emotional exhaustion at time of trauma, insufficient time allowed by the employer for coming to terms with the trauma, dissatisfaction with organizational support, and an insecure job future. At twelve-months post-trauma, posttraumatic stress symptoms were further predicted by lack of hobbies, acute hyperarousal, subsequent traumatic events, job dissatisfaction, brooding over work, and lack of social interaction and support in the private sphere (Carlier, 1997).

Previous research has also found similar results in terms of depression and anxiety (Biggam, 1997; Ansen, 1995). For example, an analysis of the data from Wilson, Poole and Trew indicated that 25% of officers reported symptoms consistent with at least mild to moderate depression (Wilson, 1997). The ability to replicate these statistics with multiple protocols is astounding.

Just like civilians, there are a myriad of reasons for officers to feel stress.

Nevertheless, officers face additional stressors such as shift work and physically demanding activities that cause physical, emotional and social stress. Due to shift work, officers often face stress in their relationships from working shifts opposite from their significant others and most of the rest of the world (Akerstedt, 1990; Barling, 1990; Brandt, 1993; Finn and Tomz, 1996). Add to this the fact that it is much harder to get

daily tasks like shopping done because they sleep all day and the physical stressors (sleep difficulties, exhaustion, reduced immunity) due to often not maintaining a consistent sleep schedule on their days off in order to see their families and get these tasks done, it becomes apparent why officers are stressed out, irritable and depressed. Further, many departments still rotate shifts every 90 days and some departments are still rotating backward, i.e. dayshift goes to midnights and midnights go to evenings and evenings to days. Research has demonstrated that it takes at least 30 contiguous days before a peoples' bodies adjust to a 180 degree rotation of their sleep schedule (Pocock et al., 1972; Anderson et al., 1987; Akerstedt, 1990; Nachreiner et al., 1995). Officers in this study reported high levels of restlessness, insomnia and irritability, all of which have been linked to, among other things, lack of quality sleep. These findings are consistent with previous research on shift work exposure (Pocock et al., 1972; Violanti and Aron, 1994; Nachreiner et al., 1995).

Physical health symptoms have also long been a problem in law enforcement, not only due to lack of sleep, but also due to high levels of stress. As of July 1, 2002, Florida Statute 440.091 proclaimed heart disease as able to be compensated by worker's compensation as a work-related injury for law enforcement officers and firefighters. Stress also has been linked to back pain, the development of ulcers, and deterioration of conditions such as diabetes and high blood pressure. The percentage of officers reporting physical health symptoms underscores the impact that stress in this profession is having on their physical well being.

Aside from mental stress, actual physical stresses such as gun belts that are too heavy, lopsided or bulky; cars that lack ergonomic design for someone wearing a twenty six pound, irregularly-shaped uniform, lack of adequate air conditioning and ventilation

in cars and having to try to write while leaning on the hoods of their cars or other places tend to lead to back pain, general physical discomfort and irritability (Finn and Tomz, 1996). This irritability may be generalized from being uncomfortable to dreading work and then it affects officers' interactions and tends to shape their perception (negatively) of everything they do that night.

Apathy at work often bleeds over into apathy about health and wellness behaviors. As the officer becomes more depressed and/or tired, they attend less to their physical needs and as they become less healthy, they become more depressed, irritable and/or tired. This is demonstrated, to some extent, in the physical symptoms checklist in which 28% of officers reported indigestion and 17% of officers reported being obese. It is probable that these officers did not start their careers with indigestion, obesity and/or high blood pressure, but due to persistent exposure to stress and having to scarf down meals while driving between calls they developed or exacerbated these problems. Although, it is worth noting that the rate of symptoms reported in this study are not much different than in the general population. Nevertheless, other studies of law enforcement officers have reported much higher levels of physical distress than were found in this report (Vulcano et al., 1984). This could indicate that officers are starting to utilize wellness programs somewhat more effectively, or their stress is being evidenced in other ways besides physical symptoms. Lack of utilization of wellness programs remains one of the most frequent complaints of supervisors and risk managers in police departments. Poor physical health impacts people's attitude and outlook, and poor attitude affects people's physical health. It is a vicious cycle.

Thirty percent of the officers in this sample also reported a sense of numbing and detachment that is not unlike previous studies on law enforcement officers (Finn and

Tomz, 1996). This is characteristic of the third of the five phases of Police Trauma Stress Disorder and is characterized by depersonalization, emotional numbing, loss of a sense of purpose, increased apathy, questions about the goodness of humanity, alienation and isolation from peers and family and the beginning of physical manifestations of stress such as indigestion, ulcers and insomnia (Anderson, 1998). Many of these officers are on the verge of burnout which increases the likelihood they will make errors, be sick more and have more stress-related health, work and family problems (Burke, 1986; Burke, 1993; Brown, 1994).

On the Bem Sex Role Inventory, of the three subscales, femininity, masculinity and androgyny, the only subscale that showed significant male-female differences at the 0.05 level or below was the subscale for masculinity (p = 0.046), with men scoring higher than women. The research showing similarity in the reports of androgynous and feminine characteristics, may be a result of the law enforcement community educating their officers about diversity and respect for individuality. This is also partly a by-product of having college-educated officers in the ranks, as the basic college curriculum provides an increased appreciation and/or of diversity. Additionally, most of the people who have been in law enforcement since the 1960s and 1970s are no longer in patrol, so, since patrol was the only division surveyed, they represented a relatively small portion of this sample. The current patrol force is largely comprised of people who grew up with affirmative action, diversity education, feminism, and without blatant segregation.

On the COPE, which evaluated coping styles along three dimensions: instrumental coping, emotion-focused coping and defensive reactions. No differences were found. This is in contrast to many studies that have found, in civilian life, men and women use different coping styles more effectively (Greenglass, 1998; Keita and Sauter,

1994). One explanation of the findings in this study is highlighted in a study by James Quick in 1992. Men and women were found to use different types of social support to buffer stress. Men used supports within the work environment and women use supports outside of the environment (Quick, 1992). This could be of great significance in debriefing officers, especially from sub-critical incidents (i.e. those for which there is not a mandatory debriefing). If the same trend holds true in law enforcement, then it might be useful to let female officers have a few minutes to call a friend instead of sending one of her teammates over to talk with her. Another possible reason for this finding is that gender-role and socialization shape coping strategies. The gender-roles of the women in this study were similar to the males, which may indicate that they will use similar coping styles.

The Work Stress Inventory was specifically designed to address work stress in emergency service occupations. Men and women did not differ significantly on the subscales: organizational intensity, organizational frequency, job-risk frequency, organizational composite or (overall) composite stress. They did, however differ on job-risk stress intensity and job risk stress composite. Female officers reported higher perceived intensity of job-risk stressors than males did. Part of this may be due to women often being of smaller stature than men. Although defensive tactics training teaches women how to accomplish the same end regardless of their size, it is possible that this training is not effective in increasing the confidence of female officers. Another possibility may be that little boys often grow up playing rougher and playing games like cops and robbers; whereas, it is less common among girls. These activities may desensitize people to things the average person would consider dangerous. A third

possibility is that female officers in patrol have less experience dealing with dangerous situations because they have been on the force for less time.

Since male and female officers demonstrated similar overall work stress, coping styles, gender-roles and perceived frequency of job-risk and organizational stressors, the question then arises "What is it about the specific stressor that makes them more stressful for different people." In a study of gender differences in coping and burnout among veterinarians, female vets perceived stressors as being much more intense than their male counterparts (Welsch, 1998). Carol Gilligan's work would point to the socialization process of females and their moral decision making process. According to her theory, women define themselves and their worth based upon the ability to care for and protect others. The moral imperative is to alleviate the real and recognizable trouble of the world. For men, the moral imperative is to respect the rights of others and noninterference in their pursuit of life and self-fulfillment. Women vets may feel the stress of trying to save someone's beloved pet, while male vets may see it as more of a clinical procedure that either succeeds or fails. Similarly, female cops may perceive more stress from the fact that the high-risk activities often only serve to cause more problems in the big picture; whereas, male officers recognize the dangerousness of the activities, but also feel a sense of accomplishment by doing their jobs and do not dwell on the enduring, ancillary social problems caused by an imperfect system.

The Masculine Role Inventory assessed people's attitudes on three traditionally masculine dimensions inhibited affection, restricted emotionality and success preoccupation. The results indicate that, in this population, there are no significant between group differences on any of these dimensions despite the fact that males had higher scores on the masculinity subscale of the Bem Sex Role Inventory.

Discussion of Hypotheses

Gender, Gender Role, Coping, Types of Stressors and Overall Stress

A multiple regression analysis was conducted to test this hypothesis. The independent variables were the variables of the three subscales of the Bem Sex Role Inventory (masculinity, femininity, androgyny); the three subscales of the Masculine Role Inventory (restricted emotionality, inhibited affection and success preoccupation), gender, age, the three subscales of the COPE (defensive, emotion-focused and problemfocused), and the four subscales of the Work Stress Inventory: Job Risk Stress Frequency, Job Risk Stress Intensity, Organizational Stress Frequency, Organizational Stress Intensity and the dependent variable was overall work stress. When the analysis was broken down to assess if there were any differences between the genders, it appears that females who endorse a defensive coping style and have less formal education tend to have higher overall work stress levels. As stated in the discussion of the demographic variables, defensive coping is primarily a method of avoidance, so the person does not deal with the problem. One possibility is that those with more formal education tend to have less stress because they are able to get out of patrol sooner and, even when they are in patrol, can see the opportunities for advancement. In many departments, ranking officers must have at least an associate's degree. Another possibility is that formal education may either serve as a method of desensitization to organizational stress, teach people how to cope with it or weed-out those people who cannot handle it.

For the male sample, coping style and educational level did not have even a modest relationship to the prediction of overall work stress. This is curious because several studies have found relationships between coping and stress levels (Biggam, 1997). Defensive coping styles have been found to be the least effective in dealing with

stress. Defensive coping involves activities aimed at helping the person avoid or ignore the problem such as drinking, trying to think about something else or excessive sleeping. The female sample in this study did show this negative correlation between defensive coping and stress levels. It is possible that the types of stressors people use defensive coping strategies with has an impact on their overall stress level. For example, if the county commission fails to approve a budget increase for pay raises, there are not many instrumental coping skills that can help change this situation. Further, emotion-focused coping strategies such as talking about it may only fuel peoples' frustration. Situations like these may actually be dealt with best by trying to avoid thinking about them. Another avenue to explore would be locus of control as some studies have indicated that locus of control is more predictive of stress levels than coping style (Richman, 1985; Grace, 1986). Other studies have also indicated that people's coping mechanisms vary depending upon the intensity of the stressor (Brown, 1998). It was found in this study that female officers perceived many the job-risk stressors as more intense. Maybe it is only when defensive coping is used with high-intensity stressors that it leads to an increase in overall stress levels.

The frequency of organizational stress and the intensity of job-risk stress most significantly contributed to the prediction of overall work stress for both genders.

Women's perception of the intensity of job risk stress tends to be higher, but their overall job-risk stress scores are similar to the males indicating that they also perceive that these stressors occur less frequently than the males do. One question to be further investigated is whether this difference is due to differential duty assignments (i.e. females are assigned to less dangerous zones) or whether, as indicated by Denise VanEssen (1990) that female

officers reported fewer traumatic events and rated the exposure to events as less traumatic and of shorter duration (Van Essen, 1990).

Gender, Gender Role, Coping and Organizational Stress

A multiple regression analysis was conducted on both the male and female sample to test this hypothesis. The independent variables were the variables of the three subscales of the Bem Sex Role Inventory (masculinity, femininity, androgyny); the three subscales of the Masculine Role Inventory (restricted emotionality, inhibited affection and success preoccupation), gender, age, the four subscales of the Work Stress Inventory (job risk stress frequency, Job Risk Stress Intensity, Organizational Stress Frequency and Organizational Stress Intensity) and the three subscales of the COPE (defensive, emotion-focused and problem-focused). The dependent variable was organizational work stress.

In an effort to identify which people will report more distress due to organizational stressors, it appears that, again, education demonstrates a negative relationship (p= 0.016) and the frequency of the organizational stressors impacts the prediction more than the perceived intensity. This is not surprising as organizational stressors are usually low-grade, chronic stressors, and persistent low-grade stress has been demonstrated to be just as detrimental as short-term intense stress (Lewis, 1995; Finn, 1996). Additionally, for female participants, a stronger endorsement of masculine characteristics was also related to an increase in organizational stress (p= .013). This could be an artifact of the types of masculine characteristics they endorse or the result of being exposed to more stressors as a result of being perceived as "one of the guys." A third possibility is that they are in a foreign environment characterized by strong masculine gender-role behaviors and experience higher stress levels as a result of trying to adapt. George Patterson (1998) found that gender and socialization affected the

amount of field and organizational stressors to which people were exposed (Patterson, 1998).

For males in this sample, not only did organizational stress frequency and intensity predict overall organizational stress, but job-risk stress also added to the prediction of organizational stress. This may possibly indicate that when there is more adrenaline-packed activity (job-risk), male officers are already drained and organizational stress ors bother them more. Another possibility is that, as job risk increases, officers feel a greater sense of entitlement to higher pay, mire respect and a greater need for adequate leadership, so their frustration with the organization increases.

Gender, Gender Role, Coping and Job Risk Stress

A multiple regression analysis was conducted on both the male and female sample to test this hypothesis. The independent variables were the variables of the three subscales of the Bern Sex Role Inventory (masculinity, femininity, androgyny); the three subscales of the Masculine Role Inventory (restricted emotionality, inhibited affection and success preoccupation), gender, age, the four subscales of the Work Stress Inventory (job risk stress frequency, job risk stress intensity, organizational stress frequency and Organizational Stress Intensity) and the three subscales of the COPE (defensive, emotion-focused and problem-focused) and the dependent variable was Job-Risk work stress

Female participants who endorse defensive and/or emotion-focused coping strategies tend to have higher scores on job-risk stress. Defensive and emotion-focused strategies do not serve to prepare the person for the next encounter or allay stress during the periods of inactivity. For instance, an officer who is stressed out by having to respond on an emergency basis to a call will maintain that same level of stress unless s/he does something about it such as taking a defensive driving course (instrumental/problem-

focused coping). Further, even during down times, that officer will fear the event in anticipation of the next time. Again, it should be noted that the COPE did not differentiate between what strategies people use to deal with specific situations. It is possible that men and women use different coping skills to deal with job-risk stressors, which could explain why men endorsing emotion-focused or defensive coping strategies did not demonstrate the same correlation. Men, even ones who are emotion focused, may deal with job-risk stressors instrumentally.

Additionally, it may be an issue of moral judgment. According to early theories about moral decision-making, males tend to perceive the world more in terms of justice and fairness and not have the same types of moral dilemmas over certain issues as their female counterparts (Gilligan, 1977). In thinking about a situation where another officer's life is at risk, a male officer may have no qualms about neutralizing the threat (shooting the perpetrator to kill). Although they will also do their job, female officers might think about the perpetrators family and feel remorse about the loss the perpetrators family would feel.

Additionally, the perceived intensity of job-risk stressors impact the model more significantly than the perceived frequency of those stressors, although both are statistically significant. It would seem that job-risk stressors that have the biggest impact on overall stress are those that are really intense, but do not happen that often. Many officers rated things like "responding on an emergency basis" as not at all stressful but happening a lot. Things like being responsible for someone else getting injured or killed ranked very high in intensity, but happen quite rarely.

For the male officers in this sample, coping style did not significantly impact their level of job-risk stress. Only job-risk stress frequency and intensity had any significant impact on the model. One avenue to investigate is what lead to the difference among officers in the perception of job-risk stress intensity. Some officers have reported that once they have a family and kids, everything seems like a much greater risk. Others report that is merely a matter of the zone to which they are assigned.

The third hypothesis once again examined the same variables and their relationship to job-risk work stress. The job-risk intensity subscale demonstrated that there are significant between group differences (p = 0.009). Interestingly, the between group differences for the job-risk composite demonstrated less variability between groups, although still significant (p = 0.06).

Regarding the prediction of job-risk stress for women. Defensive coping strategies in women added to the prediction of job-risk stress indicating that women who try to avoid thinking about the risks of the job or forget about dangerous situations tend to actually have more anxiety about those risks. Job risk stress intensity was the greatest predictor for overall job risk stress for both men and women. The frequency of the dangers was less important (although still statistically significant) in predicting anxiety/stress levels that how dangerous officers perceived the things to be

For the male officers in this sample, coping style did not significantly impact their level of job-risk stress. Only job-risk stress frequency and intensity had any significant impact on the model.

Implications and Recommendations

The results of this study indicates that male and female law enforcement officers are more similar than they are different, so using similar stress debriefing techniques and supervisory methods may be appropriate. Nevertheless, to attend to the significant

difference between the perceived intensity of job-risk stress, it would be beneficial for female officers to receive extra training in defensive tactics, and strategy and planning.

Based on findings by other researchers that 25% or more of officers have substance abuse problems and a significant proportion report violence in their relationships, it is vitally important to find a way to allow these officers to seek help (Ansen, 1995). Most of them will not go to counseling for fear of retribution by the department. Most will not call a civilian crisis hotline because they believe the counselors will not understand. Almost one quarter of officers said they would use or benefit from an anonymous, 24-hour stress debriefing hotline.

Further, it is obvious that males and females are suffering the negative consequences of a lack of wellness programming and stress management. The high levels of symptoms of depression, anxiety and Post Traumatic Stress Disorder found, not only in this study, but also many others, indicates the need for a new approach to mental and physical health in law enforcement. When officers are not well emotionally, mentally and physically, departments and the community at large have to spend more time and money covering shifts for sick officers, resolving complaints from citizens because burned out officers do not have as much patience, paying huge sums of money in law suits for officers misconduct, not to mention the costs outside of work on their home and family due to domestic violence and substance abuse.

Health and wellness programs that currently exist in law enforcement departments focus on exercise and nutrition. This is a good start, but the participation is virtually non-existent. The costs are not made to outweigh the benefits. Officers are not going to spend more time away from their families than they already do, especially if it is unpaid time. Nutritional programs teach how to eat healthfully, but fail to address the reasons

people would not want to change (i.e. the unhealthy food is free, little is open at 3am to eat etceteras). Further, although a model for Police Trauma Stress Disorder (a variant of Post Traumatic Stress Disorder caused by chronic exposure to stressful events that fall outside the normal realm of experience), very little is done to educate officers about emotional wellness and the importance of recreation that does not always include alcohol. In this study 23.4% of officers said that, if an anonymous stress debriefing hotline was available, they would use it. This is in contrast to the 7.8% of officers who use the employee assistance program.

The National Institute of Justice has started a family support grant that is geared toward helping departments fund comprehensive wellness programs that allow law enforcement families to be able to afford good childcare, have childcare available for midnight shift workers, provide free, anonymous stress counseling to officers, and pay for nutritionists, fitness centers, personal trainers and pays officers a per-hour rate to workout

Due to the high rates of anxiety, depression, muscle tension found in this study and the prevalence of burnout within the first five years on the force, divorce, alcoholism and domestic violence found in other studies, it appears that early warning signs of stress and burnout are being missed (Ansen, 1995; Finn, 1996; Paton, 1996). It would benefit supervisors to receive more training in the identification of symptoms of stress, their impact and methods of stress debriefing. Supervisors currently do their best to help their subordinates, but are either missing the signs and symptoms, or the interventions they are using are ineffective. Officers and their families could also benefit from education about stress management, communication skills, nutrition and fitness and demystification of depression and other mental health issues.

Counselors who work with law enforcement officers need to be better trained in the law enforcement culture, beliefs and taboos. Open display of emotions is difficult for most officers, male or female.

Limitations

There were several limitations to this study. Although the six departments were not from the same geographic area, they were all mid-sized to large departments in suburban and urban areas in Florida. Thus it is not possible to generalize the results to the small rural departments in Florida or departments outside of Florida

A second limitation was the size of the sample. Data collection began in 2001 and eleven other agencies throughout the state had agreed to participate, but after the disaster on September 11th, 2001, those agencies rescinded their agreement to participate. Complete surveys were returned by 360 participants. Twenty-three additional surveys were incomplete and thirty-one people refused to fill out the survey or sign an informed consent, resulting in an 87% return rate. Given the number of variables to be evaluated, this represents a relatively small sample. Additionally, women only comprised one sixth of the sample.

A third limitation was the time allotted for officers/deputies to complete the survey. The survey was extensive and most departments only allowed 15 to 20 minutes for them to complete it. This may have influenced the responses by some officers who rushed through. Further, the survey had to be paired down to only include a limited number of variables which may have prevented this study from identifying important variables contributing to officers perception of work stress. We know from research that work stress is also influenced by stress in other areas of officer's lives including home and financial stress.

A fourth limitation was the fear of retribution and relatively guarded nature of this population. Despite multiple reassurances of anonymity, many of the officers answered in ways that cast them in a favorable light (i.e. none of them ever used alcohol or drugs as a means of dealing with stress). Previous research found that distress is significant in this population not only with regard to the amount of anxiety, depression and sleep disturbances, but it is been found that upwards of 25% of female officers use tranquilizers, alcohol and over-the-counter medications to relieve tension and males (Brown, 1994) report more symptoms of hypertension, poor physical condition and gastric difficulties and over 25% use of tranquilizers, alcohol and over-the-counter remedies for anxiety and tension (Ansen, 1995; Alexander, 1996; Finn, 1996; Carlier, 1997; Richmond, 1998).

A fifth limitation would be the weakness of the Work Stress Inventory. This is a relatively new instrument, but it is one of the only instruments that directly measure stressors that are specific to law enforcement and emergency service personnel. It measures *only* work stressors to the exclusion of home, family and financial stressors. It is possible that those officers who had a higher level of stress outside of work may have higher levels of perceived stress at work. The subscales of this instrument, composite job risk stress, composite organizational stress and composite work stress served as the dependent variables in the three hypotheses that were investigated and are discussed in detail below.

Recommendations for Future Research

As we move into the 21st century, researchers and clinicians are beginning to respect the interconnectedness of people's mind and body. Work stress is impacted not only by things that happen at work, but also by officers' current emotional and physical

state, their living environment and their relationships. This study only looked at work stressors, to the exclusion of other aspects of officers' lives. A comprehensive evaluation of officers' emotional and physical state, as well as a comprehensive stress inventory might give insight into why none of the other variables were significant. For example, a rookie officer may perceive as much overall stress as a veteran officer, but the veteran officer may be more stressed by the job while the rookie officer may be more stressed about finances, childcare and "home life." This "stress" bleeds over into work and makes things like organizational politics even more intolerable and thus increases work-stress. Officers frequently commented after the survey that it did not address issues of low pay or how stress levels changed after beginning a family if they started in law enforcement before they had a family and children. Does having children, a spouse or being a single parent affect the perception of different types of work-related stress?

Further investigation of the types of physical and mental health complaints evidenced in this population may also give some insight into methods for burnout prevention. The extraordinarily high rates of anxiety, depression and lethargy are alarming given all of the research that indicates the negative impact of stress on health. The current body of knowledge about shift work would indicate that people who work midnight shift would have more stress than other people, but this has not been thoroughly investigated among American law enforcement officers.

Male and female officers report similar levels of inhibited affection, success preoccupation and restricted emotionality, as well as similar coping styles and levels of work stress, yet there was little correlation between these items. Investigating what officers themselves think contribute most to stress and most hinder coping with stress would provide fertile ground for further exploration to enhance stress prevention training.

Cops are a unique population and finding interventions that not only theoretically work but are also utilized is a challenge. Counseling and Employee Assistance Programs have been touted to improve morale and productivity in civilian occupations, yet they do not regularly have the same effect in law enforcement. Part of this is due to the stigma associated with counseling, but part of it can also be attributed to counselors not being trained to be sensitive to this population. For example, many counselors do not recognize the emasculating effect of having one's badge and gun, even temporarily, taken away. Counselors also fail to understand the nature of the job. When cops see someone burned alive in a car, they cannot stop to deal with it. They have to secure the scene, finish the report and go to the next call. Providing different types of interventions to assist in reducing stress in other areas of officers' lives may help them have enough stamina to deal with the big issues. People tend to handle stress better when they do not go into a stressful situation already emotionally or physically compromised. A longitudinal study looking at the impact certain interventions have on the number of sick days taken, perceived morale and perceived stress, such as fitness and nutrition programs, low-cost, safe day-care for midnight shift workers, and easy access to a staff nurse practitioner, may help identify interventions that are more effective with officers.

This study and others have shown that officers have high stress levels and are not coping well, so assessing specific differences in coping style and their effectiveness may be helpful. Problems with this study were the lack of truthful responding on the COPE and the fact that officers often use different coping strategies for different things, a factor that was not addressed in this study. Finally, a longitudinal survey of officers surveying a broader sample of officers and comparing police departments to sheriff's offices, urban to

rural departments and Florida officers to officers from other states would greatly add to our understanding of officer burnout.

Summary

This study provided initial information about American law enforcement officers and factors that contribute to their perception of work stress and ultimately factors that may lead to burnout. The factors of organizational stress frequency and job-risk stress intensity were strongly correlated to overall work stress. This supports the idea that chronic low-grade stress contributes to overall stress as much as periodic high-grade stress. Limitations encountered in this study and recommendations for future research were also presented.

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APPENDIX A BEM INVENTORY

Please read the following statements and mark the number that best corresponds to how often each statement represents you.

	Statement	Never True	Almost Never True	Seldom True	Sometimes True	Often True	Almost Always True	Always True
1	Self-reliant	1	2	3	4	5	6	7
2	Yielding	1	2	3	4	5	6	7
3	Helpful	1	2	3	4	5	6	7
4	Defends own beliefs	1	2	3	4	5	6	7
5	Cheerful	1	2	3	4	5	6	7

Note: Due to copyright restrictions, Mind Garden only allows five sample questions to be reproduced in the appendix.

APPENDIX B COPING WITH PROBLEMS EXPERIENCED

People often have many ways of coping. I would like to know which strategies you have been using to cope whether they help or not

	rarely	about 1/3 of the time	about 1/2 of the time	frequently
I work or do other activities to take my mind off things.	1	2	- 3	4
2. I concentrate my efforts on doing something about the situation	1	2	3	4
3. I've been saying to myself "this isn't real.".	1	2	3	4
4. I've been eating to make myself feel better.	. 1	2	3	4
5. I've been getting emotional support from others.	1	2	3	4
6. I've been giving up trying to deal with it.	. 1	2	3	4
7. I've been taking action to try to make the situation better,	- Mariana	2	3	4
T've been refusing to believe that it has happened		2	3	4
9. I've been saying things to let my unpleasant feelings escape.	- montes money	2	3.	4
10. I've been getting help and advice from other people.	. 1	2	3	4
11. I've been using alcohol or over the counter drugs to get through	1	2.	3	4
12. I've been trying to see it in a more positive light		2	3	4
13. I've been criticizing myself.	- management	2	3.	4
14. I've been trying to come up with a strategy about what to do	. 1	2	3	4
15. I've been getting comfort and understanding from someone	-	2	3	4
16. I've given up	. 1	2	3	4
17. I've been looking for something good in what is happening	1	2	-3.	4
18. I've been making jokes about it.		2	3	4
19. I've been doing something to think about it less, such as				
watching TV, reading, daydreaming, sleeping, or shopping	1	2	3	4
20. I've been accepting the reality of the fact that things happen	. 1	2	3	4
21. I've been expressing my negative reactions	1	2	3	4
22. I've been trying to find comfort in my religion or spiritual beliefs				
23. I've been trying to get advice or help from other people	1	2	3	4
24. I've been learning to live with it	1	2	3	4
25. I've been thinking hard about what steps to take		2	3	4
26. I've been blaming myself for things that happened.	1	2	3	4
27. I've been praying or meditating.	1	2	3	4
28. I've been making fun of/joking about the situation	1	2	3	4

APPENDIX C DEMOGRAPHIC QUESTIONNAIRE

For the following questions, please circle or fi	ill-in the appropriate answers.	
Gender: Male Female Age: Race	e/Ethnicity:	
Highest Level of Academic Education: High School Marital Status: married/long term relationship Current Rank: officer/deputy corporal	single separated/divorced	
Health		
Place an X next to any of the following problems t	that apply.	
Do you have problems with your Blood Pressure		
Obesity Smoking Back Pain Ulcers	Indigestion Heart disease	_
Please place and X next to all of the following statement over the last six months:	nts which have applied to you more days that	an no
1. Depression		
 2. Loss of pleasure in most activities 3. Irritability 		
4. Significant weight change (not due to going	ing on a dist or programmy)	
5. Sleep difficulties	ing on a trief of pregnancy)	
6. Restless		
7. Fatigue		
8. Feelings of worthlessness		
9. Poor concentration		
10. Indecisiveness		
11. Recurrent suicidal thoughts		
12. Feelings of helplessness and/or hopelessr		
13. Sense of numbing/detatchment/An "I don		
14. Inability to recall important aspects of stre		
15. Stressful events are repeatedly experience	ed through images, thoughts, flashbacks	
16. Anxiety		
17. Muscle tension		
18. Significant changes in sex drive		
19. Increased use of alcohol or other sedatives	3	
Would you or anyone in your immediate family use or be debriefing hotline? Yes No	benefit from an anonymous 24-hour stress	

Have you ever used the Employee Assistance Program (EAP)? Yes No What is that?

APPENDIX D WORK STRESS INVENTORY

This inventory consists of 2 scales. One measuring the frequency and one measuring the intensity of various stressors. You are asked to rate each one using the following scale.

		How Much Stress Does It cause you?			
		None	A Little	Moderate	A lot
1	NI-the in the second of the se	0	1	2	3
1. 2.	Not knowing what your superiors expect of you			2 2	3
	Having to respond on an "emergency basis"		1	2	3
3.	Disagreeing with superiors			2	3
4.	Not knowing how much authority you have	0	1	2	3
5.	Being injured or getting in trouble as a result of the			_	
	mistakes of others		1	2	3
6.	Dealing with injury or death as a part of your job		1	2	3
7.	Having to make decisions which affect other people's live		1	2	3
	Finding that rewards are not based on performance	. 0	1	2	3
_	(promotions, raises, transfers)	_		_	
8.	Having to deal with several problems at once		1	2	3
9.	Working in "high crime" areas		1	2	3
	Not knowing what supervisors think of you	- 0	1	2	3
11.	Not having an opportunity to participate in decision				
	making		1	2	3
	Having conflicting job responsibilities		1	2	3
	Working without adequate safety standards		1	2	3
14.	Having inadequate personnel or equipment to respond to a	an			
	emergency situation	0	1	2	3
15.	There is no clear or effective chain of command	0	1	2	3
16.	Having periods of inactivity followed by periods of				
	emergency response	0	1	2	3
17.	Having to physically restrain others		1	2	3
18.	Potential for being injured on the job	0	1	2	3
	Being held responsible for too many activities		1	2	3
	Knowing your error may harm another person		1	2	3
	Failing to receive recognition for achievement		1	2	3
	Having to do things on the job that are against your better				
	judgment		1	2	3
23.	Never knowing when a dangerous event may occur		i	2	3
	Feeling that your work ability is underrated		1	2	3
	Not being permitted to make decisions on your own		1	2	3
	Working for long periods of time without rest		î	2 2 2 2	3
	Performing duties which may be dangerous to others		î	2	3
	Receiving criticism from superiors		1	2	3
20.	recorring ermoisin from superiors	0	1	-	5

FREQUENCY of STRESSOR

0- NEVER

- 1- RARELY (annually)
- 2- SOMETIMES (monthly or less)
- 3- OFTEN (1-2 times per week)

	Never	Rarely	Sometimes	Often
29. Not knowing what your superiors expect of you	0	1	2	3
30. Having to respond on an "emergency basis"	0	1	2	3
31. Disagreeing with superiors	0	1	2	3
32. Not knowing how much authority you have	0	1	2	3
33. Being injured or getting in trouble as a result of the				
mistakes of others	0	1	2	3
34. Dealing with injury or death as a part of your job	0	1	2	3
35. Having to make decisions which affect other people's lives	-			
36. Finding that rewards are not based on performance	0	1	2	3
(promotions, raises, transfers)	0	1	2	3
37. Having to deal with several problems at once				
38. Working in "high crime" areas	0	1	2	3
39. Not knowing what supervisors think of you		1	2	3
40. Not having an opportunity to participate in decision	0	1	2	3
making				
41. Having conflicting job responsibilities	0	1	2	3
42. Working without adequate safety standards	0	1	2	3
43. Having inadequate personnel or equipment to respond to a		1	2	3
emergency situation				
44. There is no clear or effective chain of command	0	1	2	3
45. Having periods of inactivity followed by periods of	0	1	2	3
emergency response				
46. Having to physically restrain others	0	1	2	3
47. Potential for being injured on the job		1	2	3
48. Being held responsible for too many activities	0	1	2	3
49. Knowing your error may harm another person	0	1	2	3
50. Failing to receive recognition for achievement	0	1	2	3
51. Having to do things on the job that are against your better	0	1	2	3
judgment				
52. Never knowing when a dangerous event may occur	0	1	2	3
53. Feeling that your work ability is underrated		1	2	3
54. Not being permitted to make decisions on your own		î	2	3
55. Working for long periods of time without rest		1	2	3
56. Performing duties which may be dangerous to others		1	2	3
.,,				

APPENDIX E MASCULINE ROLE INVENTORY

Read the following statements. Decide how much they apply to you. Circle the corresponding number

		Strongly Disagree		Agree Strongly Agree	
1.	There are career drawbacks associated with being invested in a relationship-	1	2	3	4
2.	I avoid discussing my feelings because others may think I am weak	1	2	3	4
3.	If people knew how strongly I respond to others feelings they would consider me a "soft" person				
		1	2	3	4
4.	People who cry will not get anywhere in this world	1	2	3	4
5.	I would be tempted to end a relationship if my partner asked me to devote				
	more time to them than my career	1	2	3	4
6.	I prefer not to be emotionally involved with another person	1	2	3	4
7.	There are professional costs associated with sustaining close relationships	1	2	3	4

8.	I do not show how much I care about other people, because I do not want to				
	be considered immature or "whipped"	1	2	3	4
9.	People who are sensitive cannot be effective leaders	1	2	3	4
	A successful career means more to me than a successful, close relationship	1	2	3	4
11.	Strong involvement in relationships will ultimately interfere with career activities		2	3	4
12	It is costly to admit that one is emotionally upset	1	2	3	4
	In order to become a successful person it is important not to show emotional	1	2	3	4
	weakness	1	2	3	4
14.	I do not search for too much personal fulfillment from relationships because of the potential costs to my ambition	1	2	3	4
15.	If people thought of me as a sensitive person they might exploit me	1	2	3	4

APPENDIX F INFORMED CONSENT

Project Title: The Types of Stress Experienced by Men and Women in Law

Project Review Number: 2000-455

Dear Patrol Officer/Deputy:

Law enforcement is an extremely stressful occupation. It is estimated that \$2800 per employee per year is spent due to reduced productivity, absenteeism and turnover. Researchers have begun to investigate the factors that contribute to the development of these problems. Stress from direct and indirect victimization by perpetrators as well as stress caused by the "system" all add together to create an atmosphere of constant low-grade stress which is frequently exacerbated by high-priority calls and critical incidents.

I am requesting that you take a few minutes to complete this anonymous survey. The data from your agency will be combined with data from several other agencies throughout Florida. No department will be assessed independently, unless specifically requested by the Chief or Sheriff, in order to preserve the anonymity of the department as well as the individuals. No packet will be analyzed individually. Thank you for your time and participation. If you have any questions, please feel free to contact me at (904) 418-3651 or richards@ufl.edu.

Purpose of this research study: The goal of this study is to use the information to identify the current, major sources of law enforcement officers' stress. In so doing, I will be able to propose general, cost-effective interventions that could be implemented, either through departments, EAPs or grants, to reduce burnout, depression and general deterioration of officers' quality of life. This study is important, because, the studies that have been done, to date, lack generalizability to officers and deputies in the Southeastern United States due to their samples or methodology.

What you will be asked to do: Complete a set of paper-pencil questionnaires

Time required: Approximately 15 minutes

Risks: No risks are anticipated from completing the instruments; however, if you find that any of the questions elicit difficult emotions, please contact the principal investigator for a confidential counseling referral.

Benefits/compensation to participant or others: By participating in this study, you and your immediate family are invited to a half-day workshop on wellness and stress management.

Confidentiality: The packets are anonymous. Your department's name will not be used in any report. The report will only reflect that this is data collected from participants from sheriff's/police departments in the Southeastern United States. The only exception to this is if you express intent to harm yourself or others, then the principal investigator will have to notify any named victim and appropriate authorities to ensure your safety.

Voluntary participation: Participation in this study is voluntary. There is no penalty for not participating.

Right to withdraw from the study: You may withdraw from the study at any time without consequence.

Whom to contact if you have questions about the study:

Principal Investigator: Dawn-Elise Snipes, Counselor Education Doctoral Student, Department

of Counselor Education, 1205 Norman Hall, 392-0731; richards@ufl.edu. Faculty Supervisor: Dr. James Archer, 1210 Norman Hall, 392-0731

Whom to contact about your rights as a participant in this study:

UFIRB office, Box 112250, University of Florida, Gainesville, FL 32611-2250; phone: 392-0433.

Agreement:

I have read the procedure described above. I voluntarily agree to participate in the procedure and have received a copy of this description.

Participant's Signature:	Date:
Principal Investigator:	Date:

BIOGRAPHICAL SKETCH

Dawn-Elise Snipes was born in Gainesville, Florida to Ronald and Frances Richardson on December 28, 1971. After graduating from Coral Spring High School, she attended the University of Florida. She earned her Bachelor of Arts degree in Psychology and went on to earn a Master of Health Science degree from the Department of Rehabilitation Counseling. Dawn-Elise began working in the mental health field in 1997 and wanted to pursue her doctorate in Counselor Education in order to assist in the education of current and future mental health professionals. While in graduate school, Dawn-Elise taught stress and anxiety management and drugs, alcohol and society at the University of Florida, wellness concepts at Central Florida Community College and interpersonal skills at the Institute of Public Safety in Gainesville. Additionally, she became a regular, monthly columnist for a Police One, a national police magazine, was a member of Chi Sigma Iota, the Program Director for Meridian Behavioral Healthcare's residential, intensive outpatient and aftercare programs and maintained active involvement with future counselors through providing clinical supervision and hosting interns

Dawn-Elise believes in the comprehensive wellness model that emphasizes the importance of emotional, mental, occupational, physical and social wellness in helping people achieve their highest quality of life. Her future endeavors include continuing to provide counseling and consultation services to law enforcement agencies; teaching in the state law enforcement academies, and raising her 2-year-old son.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy. Dr. James Archer, Chair Professor of Counselor Education
I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy. Dr. David Miller Professor of Educational Psychology

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Luda V. Skaw

Associate Professor of Rehabilitation Counseling

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

Sindra Smith

Assistant Professor of Counselor Education

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December, 2002

Dean, College of Education

Dean, Graduate School